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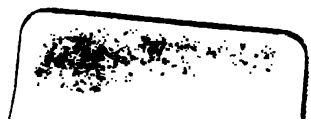

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CONTENTS

OF THE

MEDICO-CHIRURGICAL REVIEW,

No. XXXVII. JULY 1, 1833,

REVIEWS.

I.

New Views of the Process of Defecation, and their Application to Diseases of the Stomach, &c. By JAMES O'BEIRNE, M. D. 1

II.

Essay on the Natural History, Origin, Composition, &c. of Mineral Waters. By Dr. GAIRDNER 28

II. (bis.)

A Treatise on the Venereal Disease and its Varieties. By WILLIAM WALLACE. Esq. 38

III.

PERICARDITIS.

I. M. Louis' Memoirs and Researches, Anatomical and Pathological, &c.
II. Clinique Medicale. Par M. ANDRAL. Second Edition 49

IV.

Researches on the Pathology and Treatment of some of the most important Diseases of Women. By ROBERT LEE, M. D.. 58

V.

M. DUPUYTREN'S Clinical Lectures at the Hôtel Dieu 68

VI.

Mr. MAYO'S Outlines of Human Physiology.. 91

VII.

A Treatise on Diseases of the Urethra. By Mr. PHILLIPS.. 107

VIII.

The Black Death in the Fourteenth Century. By Dr. BABINGTON.. 121

IX.

Graphic Illustrations of Abortion and the Diseases of Menstruation. By Dr. GRANVILLE.. 130

X.

MORBID ANATOMY.

I. Anatomie Pathologique du Corps Humain. Par J. CRUVEILHIER, M. D... ..
II. Illustrations of the Elementary Forms of Disease. By ROBT. CARSWELL, M. D. 137

PERISCOPE.

PART I.

Spirit of English Periodical Literature.

1. Dr. Graves on the Treatment of various Diseases 145
   Head-ache in Young Women 145
   Exhibition of Opium in Enema 148
   Dysphagia 149
2. The Whites and the Blacks, phrenologically considered 150
3. Development of the Head of Dr. Spurzheim.. 152
4. On the Pathology of Purpura 153
5. Restoration of Vision in Cases of Staphyloma and incurable Opacity of the Cornea.. 156
6. Abscess of the Kidney and Cerebellum 159
7. Salutarium in the Western Highlands 160
8. Obituary of Dr. Babington, with some Remarks.. 161
9. (Review)—On Hysteralgia, or Irritable Uterus. By Dr. Davis 162
10. (Review)—Observations on the present State of Pharmacy in Ireland. By Mr. Phelan.. 166
11. Discharge of Worms from various Parts of the Body. By Mr. Neilson 168
12. (Review)—Observations on the Testicles. By Professor Russell 169
13. Dr. Stokes on Gastritis and Dyspepsia 175
14. Mr. Robertson on Dry Cupping 178
15. The Medical Boards—Vaccine Board 180
16. The Factories' Regulation Bill 181
17. The Heliotrope; or, Pilgrim in Pursuit of Health 183
18. March of Intellect. Magnetic Extraction of Tic Douloureux—Method of Dissolving Calculus in the Bladder—Surgical Operations during Somnambulism, 184
19. Labour or Ennui? Which is the greater Evil? Factory Labour 185
20. Dr. Carswell on Carcinoma 186
21. Retention of Urine, from Imperforate Hymen 190
22. Hysteria fatal 191
23. Memorial of the London Physicians 192

PART II.

Spirit of the Foreign Periodicals.

24. Report of the Medical School in Egypt.. 193
25. Professor Roux on the Cause of Death after severe Injuries 195
26. Boiling Liquor Potassæ swallowed 195
27. Amputation at the Hip-joint 195
28. Chlorosis mistaken for Disease of the Heart.. 196
29. Variola after Vaccination.. 196
30. Turpentine in Sciatic Neuralgia 197
31. Reproduction of the Chrystalline Lens 197
32. Lisfranc's Treatment of Amaurosis.. 199
33. Obliteration of the Uterine Veins after Puerperal Fever 199
34. Observations on the Morbid Anatomy of the Viscera in Puerperal Fever.. .. 200
35. On Hydatids, and their Conversion into Tubercles 201
36. New Speculum Uteri—Cure of Sterility.. 202
37. Induction of Premature Labour by means of Sponge and by Puncture 202
38. Malignant Carbuncle in Italy.. 203
39. Extemporaneous Vesication 203
40. Remedies against Scrofula 203
41. Insanity in Italy.. 203
42. Two extraordinary Cases of Fasting 204
43. Extraordinary Case of Congenital Bulimia 206
44. Arteritis and Spontaneous Gangrene 207
45. Quinine successfully used in Tooth-ache 209
46. Preservation of Leeches by feeding them with Sugar.. 209

47. Gangrene of the Lungs 209
48. Sudden Death from Paralysis of the Lungs.. 210
49. Fatal Purpura Hæmorrhagica.. 210
50. Double Vision in one Eye 211
51. Medical Monomania 211
52. Fissures and Depressions in the Sculls of New-born Infants 211
53. Total Mortality from Cholera in France, 95,000! 212
54. On Pneumonia Hypostatica 212
55. Purulent Diathesis—Pericarditis 213
56. Anatomical Anomalies 213
57. M. Sedilot on Plica Polonica 214
58. Intestinal Entozoa 214
59. Amaurosis from Onanism in a Female 214
60. Ossification of the Retina 215
61. Aromatic Odour exhaled from the Arm 215
62. Chloride of Lime in Psora 215
63. Fatal Effects of a Tartar-Emetic Plaster 215
64. Leech-bite Hæmorrhage fatal 216
65. Kermes Mineral in Pneumonia 216
66. M. Pigeaux on the Sounds of the Heart 216
67. Neuralgia—Intermittent Cough 217
68. M. Dupuytren on Prolapsus of the Rectum.. 217
69. Researches on the Conium Maculatum. By Foderé.. 218
70. Dr. Cerioli on Hydro-Ferro-Cyanate of Quinine in Intermittent Diseases .. 219
71. Iron in Chlorotic Gastralgia 220
72. Singular Convulsive Disease 220
73. Indian Ophthalmia treated by Alum 221
74. Clot Bey on Cholera in Egypt.. 222
75. On Cyanosis 223
76. Cases of Pleuro-pneumonia treated by large Bleedings 225
77. On the Qualifications of a Physician. By M. Tiedeman 227
78. Remarkable Cures. By the late M. Dance—at the Hôtel Dieu.
1. Hypertrophy of the Heart 228
2. Complete Paraplegia 228
3. Chronic Inflammation of the Cervix Uteri 229

INSTITUTE OF FRANCE—ACADEMY OF SCIENCES.

79. M. Dutrochet on the Mechanism of Respiration in Aquatic Insects 230
80. M. G. St. Hilaire on Hermaphrodism 231
81. On the Adulteration of Salt in France.. 231
82. Luminous Urine 232
83. Anatomy of the Medusa Marsupialis. By Dr. Edwards 232
84. On the Ascension of the Roots of some Plants 232
85. Report of the Academy on St. Hilaire's Work on Hermaphrodism.. 232
86. Effects of large Quantities of Quicksilver swallowed.. 233
87. M. Boussingault on the Thermal Waters of the Andes 234
88. M. Maingault on Tracheotomy 234
89. Double, or Bilobed Uterus—Disease of the Kidneys—Bilobed Bladder.. .. 234
90. M. Dubois on the Presentation of the Head in Labour 235
91. Epidemic Fever at Besancon 235
92. Singular Case of Paraplegia 236
93. Remarkable Variety of Hermaphrodism 237
94. Satyriasis following a Blow on the Head 238
95. Anomaly in the Arch of the Aorta 239
96. Two Cases of Œsophagotomy. By M. Begin 239
97. Death from Admission of Air into the Jugular Vein.. 241
98. Insalubrity of Paris 241
99. Imperfection in the Heart, without Cyanosis 242
100. Extirpation of a Diseased Ovary 242
101. Purulent Diathesis 242
102. External Discharge of Biliary Calculi 243
103. Treatment of Hooping-Cough and Measles by Antimonial Frictions 244

104. Majendie's Lectures on Cholera 244
105. Diptherite—tracheotomy 245
106. New Operation for Laryngo-pharyngeal Fistulæ 246
107. Curious Monstrosity—Germination 246
108. New Conjecture on the Cause of the Circulation 247
109. Organs of Circulation in the Crocodile.. 247

PART III.

Clinical Review and Hospital Reports.

110. Surgical Report from the Glasgow Royal Infirmary. By Mr. Stirling 249
Foreign Body in the Trachea—Operation 249
Tumour in the Neck—Laryngotomy 250
Wound of Throat—Pharynx opened 251
Carcinoma Recti 252
Injuries of the Head.. 253
Excision of the Elbow-joint 255

111. Birmingham Infirmary.
Mr. Middlemore's Ophthalmic Report.. 257
Small-pox Pustule of the Cornea 257
Conical Cornea.. 258
Quina in Strumous Affections 258
Hydrophthalmia 259
Strychnia in Amaurosis 260

112. Bristol Infirmary.
Case of Osteo-Sarcoma, with Operation 261

113. Liverpool Northern Dispensary.
Case of Melanosis 263

114. Bridgewater Infirmary.
Fixing the Scapula in Cases of Dislocation.. 265

115. Rathkeale Dispensary.
Asphyxia of New-born Children 265
Hemeralopia 266
Iodine in Caries of the Vertebræ 266

116. Bristol Infirmary.
Inguinal Aneurism 267

117. Dublin-County Infirmary.
Mr. Crampton on Dislocation of the Shoulder 270

118. St. George's Hospital.
I. Two Cases of Morbid Growth from the Lower Jaw 274
II. Case of Morbid Growth, apparently fungoid, of the Antrum 277
III. Polypoid Growth from Æthmoid Cells.. 278
IV. Scrofulous Disease of Lower Jaw.. 279

119. Guy's Hospital.
Ulcers of the Face treated by Acids 279
Strumous Ulcers commencing in Ecthyma.. 280

120. London Hospital.
Osteo-Sarcoma—Removal of the Superior Maxillary and Malar Bones 281

121. Middlesex Hospital.
I. Sir C. Bell on Contraction of the Prepuce 282
II. Femoral Hernia, with double Hernial Sac 283

PART IV.

Miscellanies.

1. Periodical Press 284
2. Remarkable Cessation of the Pulse in both Arms. By Dr. Fergusson 285
3. Cholera 285
4. Medical Politics—Apothecaries.. 286
Bibliographical Record.. 296

CONTENTS

OF THE

MEDICO-CHIRURGICAL REVIEW,

No. XXXVIII. OCTOBER 1, 1833.

REVIEWS.

I.

Observations on Injuries and Diseases of the Rectum. By HERBERT MAYO, Esq.. 289

1. On Laceration of the Rectum.. 289
2. On Protrusion of the Rectum.. 292
3. Bleeding and Pain of the Rectum.. 294
4. Stricture of the Rectum.. 299
5. Cancer Recti 303

II.

Outlines of Pathology. By W. P. ALISON, M.D... 306

III.

The Infirmities of Genius, illustrated by the Habits and Constitutions of Men of Literature and Genius. By R. R. MADDEN, Esq. 316

III. (bis.)

MORBID ANATOMY.

I. Anatomie Pathologique du Corps Humain. Par J. CRUVEILHIER (17th Livraison) 329
II. Principles and Illustrations of Morbid Anatomy. By J. HOPE, M.D. Part VI.

1. Puerperal Inflammation of Muscles and Membranes 330
2. Hyperæmia of Alimentary Canal 332
3. Softening of the Alimentary Canal 336

IV.

The Analysis of Inorganic Bodies. By Professor BERZELIUS. Translated by Mr. REES 337

V.

Researches from the Case-book, to illustrate the Influence of the Mind on the Body, &c. &c. By R. FLETCHER, Esq. 341

VI.

Observations on the Illusions of the Insane, and on the Medico-legal Question of their Confinement. From the French of M. ESQUIROL 352

VII.

Transactions of the Provincial Medical and Surgical Association, Vol. I. 358

1. Theory of the Frontal Sinus—(Dr. MILLIGAN) 359
2. Observations on the Peculiarities of the Diseases of Infants—(Dr. MILLIGAN) 361
3. Cases illustrating Diseases of the Heart. By Dr. JEFFREYS 365
4. Observations on the different Signs which distinguish the Sac in strangulated Hernia, with practical Remarks. By Mr. JAMES 368

VIII.

A Treatise on the Venereal Disease and its Varieties. By WILLIAM WALLACE, Esq. 372

1. Primary Syphilis 374
2. Phagedænic Primary Syphilis.. 395

3. Phagedænic Primary Syphilis without Slough 397
4. Phagedænic Syphilis, with White Slough 405
5. Phagedænic Syphilis, with Black Slough 410

IX.

A Treatise the Diseases of the Liver and on Bilious Complaints. By GEORGE H. BELL, Esq. 415
1. Sero-hepatitis 416
2. Puro-hepatitis 417

X.

Theoretisch-Pratisches Handbuch, &c. *i. e.* a Manual of the Theory and Practice of Midwifery. By Dr. FRORIEP, of Weimar 418

XI.

Considerations Practiques sur les Neuralgies de la Face, *i. e.* Practical Observations on Neuralgia of the Face. By M. HALLIDAY, M.D. 421

XII.

The Homœopathic Medical Doctrine, or Organon of the Healing Art; a new System of Physic, from the German of Hahnemann. By Messrs. DEVRIENT and STRATTEN 429

PERISCOPE.

PART I.

Spirit of English Periodical Literature.

1. Our Art in Turkey 433
Physicians in Turkey 433
Fees in Turkey 436
Apothecaries in Turkey 438
Poisoning in Turkey 438
2. Dr. Graves on the Treatment of various Diseases 439
Lord Bacon's Remarks on the Sins of Physicians 439
Fracture of Ribs 441
Suffocative Catarrh 441
Mortification of the Liver 443
Purpura Hæmorrhagica 444
Emmenagogues—Pulse in Hydrocephalus 445
3. Danger of examining Females, Dr. Baird's Case—Persecution in Liverpool .. 446
4. Dr. Elliotson on Yellow Vision in Jaundice 447
5. Diseases of the Eye in and after Cholera 447
6. Croton Oil as a Counter-Irritant 448
7. Carotid Aneurism, by Operation on the Distal Side of the Tumour 448
8. What Syphilis and Mercury can do.. 449
9. Severe Case of Hydrocephalus terminating in Recovery (Dr. Graves) 451
10. Umbilical Hernia—Protrusion of Liver 453
11. Mr. Flemming on Affections of the Septum of the Nose 454
A. Bloody Tumour 454
B. Abscess of Septum 454
12. Dr. Ayre on Cholera—(Review) 457
13. Mr. Carmichael on Inflammatory Affections of the Brain and Membranes, with numerous Cases—(Review) 459

14. Dr. Davis's Principles and Practice of Obstetric Medicine—(Review) Nymphomania 465
15. On some Points connected with the Anatomy and Surgery of Inguinal and Femoral Hernia. By G. J. Guthrie, Esq.—(Review) 470
16. On the Character of the Esquimaux, phrenologically considered 474
17. Mr. Eastcott on Fatty Discharges from the Bowels 477
18. Dr. Ashburner and Mr. Belinaye on Sarsaparilla and the Smilax Aspera.. .. 477
19. Mr. Bloxham on Dislocation of the Head of the Femur on the Os Pubis, with Fracture of the Femur 480

PART II.

Spirit of the Foreign Periodicals.

1. Dr. Otto on Small-pox, Vaccination, &c. 481
2. Dr. Hufeland on the Influenza at Berlin 484
3. Coincidence of Human Epidemics with those among Fishes. By M. Alibert.. 485
4. Messrs. Chomel, Recamier, Dance, and others, on large Doses of Antimony in Phlebitis and Pulmonary Hæmorrhage 486
5. Clinical Report from La Pitié on Variola and Varioloid 487
6. Paraplegia in a young Girl, cured by Strichnine.. 487
7. Clot Bey on the frequency of Calculous Disorders in Egypt 488
8. M. Labat on the Taliacotion Operation in Egypt.. 489
9. Gastrotomy in a Case of Extra-Uterine Pregnancy 491
10. Professor Lobstein on Vaccination 491
11. Etiology and Treatment of Gangrena Senilis. By M. Dupuytren 492
12. Pommade to preserve the Hair 493
13. Extracts from German Literature.
    1. A wonderful Heart 493
    2. Excision of Articulations.. 494
    3. Hypertrophy of the Mamma 494
14. Adhesion of the Placenta 498
15. Gonorrhœa communicated by swallowing the Discharge 498
16. On the different kinds of Goitre 498
17. Anencephalous Monstrosity 499
18. Clinical Observations on—
    A. Croup.. 501
    B. Excision of the Clavicle 501
    C. Morbus Coxarius 501
19. Rhinoplastic Operation 502
20. Chemistry of the Serum of the Blood 502
21. Medical Galvanism 503
22. Lithotrity 503
23. Triple Ureter 504
24. Poisoning by Fumes of Arsenic 504
25. M. Bouillaud on Apoplexy 504
26. Somacetics in relation to Orthopody 504
27. Exstrophy of the Bladder.. 505
28. Inoculation of Syphilis 506
29. Open Foramen Ovale in an Adult 506
30. M. Portal's Prize-Legacy 506

31. New Article of Food 506
32. Extra-Uterine Pregnancy.. 506
33. On Pellagra.. 507
34. Petechial Fever in Italy 508
35. Tonospasmia—a new Nervous Disease 509
36. Encysted Abscess of the Cerebellum 509
37. Review of Cruveilhier.
A. Atrophy of the Convolutions of the Brain 510
B. On some Diseases of the Muscles 512
C. Case of Diaphragmatic Hernia 513
38. Dr. Froriep on the Medico-political Regulations against the Cholera—(Review) 513
39. On the Position of the Embryo and Fœtus in the different Classes of Animals. By M. Dubois.—(Review.) 515
40. M. Chosy on Polypous Concretions in the Heart 518
41. M. Bouillaud on the Sounds of the Heart and Arteries 519
42. On Ulcers, Indurations, &c. of the Os Tincæ. By M. Duges and Mad. Boivin, with numerous Cases—(Review) 522
43. M. Maingault on Croup 526
44. M. Mott's Improvements in Medical Electricity 526
45. Dr. Coste on Embryology.. 527
46. Helminthology 527
49. Traumatic Tetanus—Cholera—Diptherite 528

PART III.

Clinical Review and Hospital Reports.

1. Review of Dr. Macfarlane's Clinical Reports on Burns and Scalds, with numerous Cases, Observations, and Dissections 529
2. Dr. Roots' Clinical Lectures—Fever—Porrigo—Acute Rheumatism—Hepatic Abscess 538
3. Clinical Lectures of M. Dupuytren on Fissure of the Anus.—(Review of the Third Volume) 542
4. Dr. Latham's Clinical Lectures on the Duration of Fever—(Bartholomew's).. 544
5. Cases of Laryngotomy. By Mr. Arnott—(Middlesex Hospital) 546
6. Clinical Report of Cases, illustrating the Treatment of Gonorrhœa. By Mr. H. J. Johnson, House Surgeon of the Lock Hospital 549
A. Abscess of the Cellular Membrane of the Penis 559
B. Induration of the Corpus Spongiosum Urethræ 561
C. Enlargement of the Lacunar Glands of the Urethra 561

Miscellanies.

I. Aldersgate Dispensary 564
II. Royal College of Surgeons 565
III. Medical Reform—College of Physicians 566

OBITUARY.

1. Dr. Darwall 569
2. Mr. Alcock 571
Bibliographical Record 571

Extra-Limites.

Mr. Phillips' Letter to the Editor of the Med.-Chir. Rev. 573

THE

Medico-Chirurgical Review,

No. XXXVII.

APRIL 1 to JULY 1, 1833.

I.

NEW VIEWS OF THE PROCESS OF DEFECATION, AND THEIR APPLICATION TO THE PATHOLOGY AND TREATMENT OF DISEASES OF THE STOMACH, BOWELS, AND OTHER ORGANS; WITH AN ANALYTICAL CORRECTION OF SIR CHARLES BELL'S VIEWS, &c. By *James O'Beirne*, M.D. Surgeon Extraordinary to the King, and one of the Surgeons of the Richmond Surgical Hospital in Dublin, &c. Octavo, pp. 286. Dublin and London, February, 1833.

ORIGINALITY, whether theoretical or practical, has been so rare, of late years, in medicine, that it is quite refreshing to see even the pretension to it confidently made. The recent epidemic, indeed, gave origin to some novel doctrines and practices, but unfortunately they were very ephemeral, giving way to one another, like the waves of the ocean. The venous injection promised, for a moment, to realize all the miracles of Medea's cauldron, but soon experienced the common lot of man and his works. The author of the work before us appears to apprehend much opposition from "that tendency of the mind to be slow in admitting, and active in resisting every new truth, particularly whenever that truth happens to conflict with either long-established or preconceived opinions; and shews the sources from whence I chiefly anticipate opposition." We put it to Dr. O'Beirne's cool judgment whether this opposition is not rather against new *doctrines* than against new *truths*, and until every new assertion is proved to be a true one, we think the caution extremely salutary. What has occasioned all this backwardness to receive new truths? Nothing originally inherent in human nature—nothing but the woeful experience that nineteen new truths out of twenty are no truths at all! How can we know that an author is the exception to the general rule till his truth is tried by experience; and who can wonder at the backwardness of the public to make the experiments, when that public is certain of being misled nineteen times in twenty. We cannot but think that Dr. O'Beirne's apprehensions are groundless; for in these days no proposition, however absurd, will long remain untested.

As for opposition, it is the best thing that can happen to any novel proposal. Did opposition prevent the introduction of cool air in small-pox—or the practice of vaccination—or, in fact, any real improvement in medicine or surgery? Certainly not. It is doubtful whether the circulation of the blood would now be known, had not the violent opposition to Harvey secured the discovery against neglect and oblivion. If Dr. O'Beirne's new views be correct, and his practices successful, he ought to pray every night, on his bended knees, for every species of opposition—nay, for every term of reproach from that race of critics which he now objurgates with quotations from Locke. But we shall now proceed to do the author the best service in our power—that of making the contents of his work known to the public.

In the Autumn of 1821, the author treated a case of traumatic tetanus with success by means of tobacco enemata. In May, 1822, he employed the same remedy in another case, but it failed. In both cases, however, he observed that there was great difficulty in pushing the injection higher up than the rectum. This circumstance convinced him that the muscular coats of that gut participated in the state of general spasm. The idea therefore occurred of introducing an elastic tube into the sigmoid flexure of the colon. In October of the same year, an opportunity occurred of testing this idea. The case was one of traumatic tetanus. A large gum elastic catheter was pushed up with great difficulty through the contracted parietes of the intestine; and at length, when introduced to the extent of nine or ten inches, it rapidly passed forward, as through a narrow ring, "when an escape of flatus and fluid fæces took place from its extremity, (the inner end having been cut off and smoothed,) giving great relief to the patient." It was now in Dr. O'B.'s power to administer the tobacco enema, so as to insure its own peculiar effects, and open the bowels. The patient recovered; "and from this period may be dated my unexampled success in treating this hitherto most fatal and intractable disease." In the mean time, other diseases, attended with constipation, came before him, and suggested the trial of a similar remedy—or rather a similar mode of throwing up various purgative fluids. "In almost every instance in which these trials were made, the plan was attended with the most decided and prompt success." Dr. O'B. was also led to the conclusion that, "the natural action and state of the bowel (rectum) were directly opposite to what they have always been considered to be." Experiments were made on the rectum of persons in health, and the author's were confirmed.

"From the earliest period to the present, all physiologists have described the fecal matter as passing freely from the sigmoid flexure of the colon into the rectum, and gradually distending the latter until, by its pressure, such a sense of uneasiness is communicated to the sphincter ani and muscles of the perineum, as to rouse the diaphragm and abdominal muscles to effect its expulsion from the body. It is a universally received opinion also, that the power of retaining the feces and controlling their discharge, depends exclusively upon the sphincter muscles of the anus.

These opinions, it is obvious, originated from the circumstance of the sigmoid flexure and the rectum appearing in the dead body as one continuous tube, and also from the fact of there being nothing like a sphincteric arrangement of fibres

observable in the muscular coat of either of these portions of the intestinal canal. But venerable as they are rendered by time, and plausible as they may appear, the following facts and observations will be sufficient to shew that they are quite erroneous, and formed upon the most superficial and deceptive views." 3.

The design of Nature (observes our author) to convert the large intestines into a depôt for the reception and retardation of the fæces would have been rendered abortive, if a free communication existed between the sigmoid flexure and the rectum—such a free communication necessarily exposing the rectum to frequent accumulations, and the sphincter ani to continued irritation.

" *Secondly*. The circumstance of Nature forming one of her chief depôts for excremental matter in a part of the intestinal canal so close to, and continuous with the rectum, as the sigmoid flexure is, appears altogether inconsistent with the idea of a free passage between these portions of the canal.

Thirdly. In the act of receiving an enema, every person is sensible of a *considerable degree of opposition to the ascent of the fluid in the rectum*. It is well known, also, to those in the habit of administering injections per anum, that, although the syringe may be in the best order, properly filled, and its pipe fairly inserted up the rectum, *considerable force* is generally required to discharge the fluid, from the resistance given to its passage upwards.—These facts would lead us to infer that the rectum, so far from being open, is firmly contracted and closed.

Fourthly. Surgeons find it necessary to pass a finger up the rectum, either to direct the course of a catheter, sound, or staff, to discover whether a fistula communicates or not with the bowel; to detect the presence of a calculus in the bladder, or a stricture in the intestine itself; to ascertain the state of the prostate gland; and for various other purposes; and yet it is a fact that it has exceedingly rarely happened, that, on any of these occasions, the finger has encountered either solid or fluid feces in the rectum, or presented a soiled appearance when withdrawn. Indeed, as far as my experience and inquiry has enabled me to speak on the point, in the few instances in which such examinations have detected the presence of excrement in the healthy rectum, it has been invariably found in very small quantity, and never in any but the lowest part, or pouch, of this intestine. It is, also, a fact familiar to apothecaries and nurses, that the pipe of the injecting syringe, however long it may be, is rarely, if ever, found soiled with fecal matter when withdrawn after administering an enema. These circumstances shew that the rectum is contracted and closed, so as to prevent free communication between it and the sigmoid flexure." 5.

Before proceeding further, we must beg to enter our protest against the correctness of the *third* proposition in the above extract. We appeal to universal experience, whether this difficulty in throwing up enemata be not the *exception*, rather than the general rule. Excepting in morbid irritability of the bowel, or accumulations in the rectum or sigmoid flexure, we rarely experience any difficulty in throwing up fluids, after the pipe has fairly passed the sphincter ani. We confess, therefore, that this early attempt to strain an exception into a general rule in order to support a theory, has thrown us a little on our guard, in this early stage of the examination on which we are entering. At the same time, we do not deny that the *natural state* of the rectum, as of all hollow muscular tubes or pouches, is contraction, *till* distended by their natural contents. Is not the bladder in a state of contraction, till distended by the urine from the kidney? But when distended and containing urine, is the bladder not also in a natural state—that is, in a state which Nature designed it to be in, much more frequently, and for a

much longer space of time, than in the condition of contraction? Because the stomach is in a state of contraction (comparatively) in hunger, is it in an *unnatural* state during the digestion of our food, when distended with aliment?

The *fourth* proposition is ingenious. Every practitioner well knows that, generally speaking, when operations are performed on the bladder or rectum, the bowels are previously cleared by an aperient or a lavement; and so far the author is correct, when he says that the finger rarely encounters solid or fluid fæces in the rectum. But, if this preliminary caution is not used, we venture to assert that the finger will *very frequently* come out of the rectum soiled with fæcal matters. In fact, we mean to assert that, except after evacuations, natural or artificial, it is almost as common to find fæces in the rectum as water in the bladder. At the same time, we believe and know that the rectum is not the sole depositary of fæcal matters; for we are quite certain, from much attention to the subject, that *during* almost every natural or artificial evacuation of the bowels, a considerable portion of the evacuated matters comes from the sigmoid flexure of the colon. Any person, who is not very corpulent, may ascertain the fact, by pressing the fingers of his left hand deeply into the hollow of the left ilium, just before an evacuation. He will there feel a kind of wedge, which disappears during the evacuation of the fæces. Nay, we can assure our readers that this very pressure of the fingers will often, we had almost said *generally*, excite the bowel into action, and greatly assist the expulsion of the fæces, in costive habits.

"*Fifthly*. Membranous filaments have seldom, if ever, been found traversing in various directions the cavity of either the small intestines, the cæcum, or the colon, while they have often been met with in the rectum. This fact proves that the parietes of the rectum must have been contracted, and its lining membrane in close contact at all points, for a time sufficient to effect the firm organization of these filaments, and, consequently, that there could have been no communication between this intestine and the sigmoid flexure for, at least, several hours.

Sixthly. The two sphincter muscles of the anus are considerably weakened in the disease called prolapsus ani;—in the operation for fistula in ano, these muscles are completely divided, and thereby wholly incapacitated, for a certain time, from acting as sphincters;—not only these muscles, but also a portion of the rectum above them, are occasionally destroyed by venereal, cancerous, and other ulcerative processes; yet it rarely happens that the power of retaining the alvine contents is found to be at all impaired in any one of these cases. It is therefore manifest that this could not possibly occur if the passage into the rectum were as free as it is supposed to be, or if the power of retaining the fæces, and regulating their discharge, depended solely on the sphincter muscles of the anus." 6.

The fifth proposition we do not clearly comprehend, and, therefore, we shall not comment upon it. If Dr. O'Beirne had ever had the misfortune to be cut for a fistula, he would have experienced the disagreeable inability of retaining the fæces *till* the muscle had recovered its power by the healing of the cut. Has Dr. O'B. never seen one of those melancholy cases where the sphincter ani is lacerated in child-birth, and where the inability to retain fæces continues for life? If he has not, we can shew him one whenever he pleases to see it. The reason why, in such cases, the fæces are not *constantly* draining from the rectum appears to be, that they are not *constantly*, but periodically moving along the line of the colon. Once or twice in the 24 hours, the fæces become accumulated in the colon (chiefly

the sigmoid flexure) and the rectum, and then the stimulus of their presence induces both portions of gut to contract and expel them. That they very often stagnate, as it were, in the rectum, is well known to those who are often in the habit of examining the vagina of the female. Nothing is more common than to find the rectum loaded with solid fæces in such cases. We shall now give the author's description as to the natural and ordinary state of the rectum.

"*Seventhly.* Seeing the forcible nature of the foregoing facts, and anxious to test the truth of the inferences drawn from them, I have been led to examine the rectum of a number of healthy persons, healthy at least as far as the bowels were concerned, at different times in the same day, in order to ascertain its actual state, and as nearly as possible the time and manner in which it is filled. I proceeded in the following manner, and almost invariably obtained the following results. On passing a stomach tube to the height of half an inch up the rectum, neither flatus nor feces escaped through it; passing it up about an inch and a half higher, it was still found that nothing escaped, but that it could be moved about freely in a space which, on introducing the finger, was ascertained to be what anatomists call the pouch of the rectum, in a perfectly open and empty state. From the highest part of the pouch to the upper extremity of the bowel, generally a distance of from six or seven to eight inches, it was found that the tube could not be passed upwards without meeting with considerable resistance, and using a degree of force sufficient to mechanically dilate the intestine, which was plainly felt to be contracted so as to leave no cavity for this extent. When the instrument reached, in this way, the uppermost point of the rectum, the resistance to its passage upwards was felt to be sensibly increased, until at length, by using a proportionate degree of pressure, it passed forward rapidly, and as if through a ring, more or less tight, into a space in which its extremity could be moved with great freedom; and as instantly a rush of flatus, of fluid feces, or of both, took place through the tube. In some instances, indeed, it happened that neither gaseous nor liquid matter escaped at this moment, but, in all these, the distinct feel of the extremity of the tube having entered a solid mass in the flexure, was communicated to the hand; the instrument, on being withdrawn, exhibited a few inches of its upper extremity covered, and its eyes plugged up, with solid excrement; the person generally went to stool soon after, and passed a large quantity of solid feces. In every instance where the tube presented the least appearance of feces after being removed, this appearance was confined to that portion of its upper extremity which had entered the sigmoid flexure.

In this way, I have also examined the rectum of healthy persons in a few minutes after they had passed a stool, and of others at the moment when they felt a moderate inclination to go to stool, and have ascertained that the rectum is in a perfectly empty and contracted state at both of these periods.

The results of these examinations establish the correctness of the inferences drawn from a number of facts, but in a much more positive and precise manner, for they distinctly prove, first, that in the healthy and natural state, all that part of the rectum above its pouch, is at all times, with the single exception of a few minutes previous to evacuation of the bowels, firmly contracted and perfectly empty, at the same time that the pouch itself and also the sigmoid flexure of the colon, are always more or less open and pervious; lastly, that the sphincter ani muscles are merely subsidiary agents in retaining the feces." 8.

Should these statements be confirmed by the experience of others, they will strengthen very much the views of the author. Dr. O'B. next proceeds to shew, from anatomy, that the parts in question cannot be in any other than the condition above-mentioned. The anatomical reasons we must condense as much as possible. *First.* The small intestines have hardly more

than one muscular coat; and the same of the colon and cæcum, with the addition of three narrow longitudinal bands. The rectum possesses an internal coat composed of strong fibres circularly arranged, and also an external one of longitudinal arrangement, the three longitudinal bands of the sigmoid flexure sending down strong fleshy fibres to be expanded upon, and intermixed with those of the external coat. Hence the author concludes the rectum exceeds every other part of the intestinal canal in muscular power. *Secondly*, This is the only portion of gut into which we can trace branches from the regular spinal nerves without previous interlacements with filaments from the sympathetic—consequently it is the only part of the intestinal canal receiving, directly, both motific and sensific nerves. It is fair to infer that this gut then possesses a higher degree of irritability and sensibility. When a tube so constituted is called into strong action, the effect will, he thinks, be perfectly similar to what takes place in the œsophagus after deglutition, namely, to contract its parietes and obliterate its cavity in that portion which is above the pouch. That the rectum is quiescent during the intervals of defecation, is, he thinks, incontrovertible.

"But I shall now show that a change which the flexure undergoes at the same moment, maintains the rectum in this favourable situation until such time as another evacuation of the bowels is about to take place. This change consists in the inferior and greater portion of the empty flexure falling into the pelvis, hanging doubled over, and rather to the left of the rectum, remaining in this situation until it is raised by distension into the place it had previously occupied in the left iliac fossa; and it is scarcely necessary to observe, that the first of these changes of position is one which would effectually prevent the descent of fluid or solid feces, if not of flatus, and thus secure the undisturbed condition of the rectum." 13.

This last statement needs confirmation by others. The author is now prepared to exhibit his own view of the process of defecation, and we shall give them in his words, since claimants to originality are generally jealous of any misconception of their discoveries.

"The contents of the stomach having passed through the pylorus, and entered the superior transverse portion of the duodenum, this portion of the intestine, previously in a passive state, is now roused into activity by the stimulus of distension, the circular and a few comparatively very minute longitudinal fibres which compose its muscular coat, contract forcibly upon the contained mass, and urge it into the next, the middle or perpendicular portion, in which its presence also excites contraction; and thus by a succession of similar dilatations and contractions, the mass is propelled in a gradual and regular manner through the inferior transverse portion into the jejunum, and thence to the termination of the ileum. This process, however, is considerably assisted by the firm, equable, and constant pressure to which the small intestines, in particular, are subjected by the diaphragm behind and the abdominal muscles before in their alternate contractions to assist in carrying on ordinary respiration. It is also greatly facilitated by the circumstance of the gaseous matter necessarily taking the precedence, dilating the bowel before it, and thus, if not wholly effacing, greatly diminishing the acuteness of the numerous angles formed by the convolutions of the small intestines, and which would otherwise present so many serious obstacles to the progress of the solid and fluid parts of the mass. Having been conveyed by these means to the extreme termination of the ileum, the contents, now reduced to excremental matter and a considerable quantity of a peculiar fetid gas, are propelled into the cæcum through the ileo-cæcal valve, which is so

constructed that, at the same time that it affords them a perfectly free passage, it effectually prevents even their fluid or gaseous portion from returning, either in health or disease, into the ileum. Having entered the cæcum, they are there very differently circumstanced, and moved forward by a very different process. But as I find it most difficult, if not impracticable, to explain these points in a sufficiently clear and satisfactory manner, without first disposing of others, I shall defer their consideration for the present, and assume that the fecal mass has been conveyed into the sigmoid flexure, and that the repeated descent of similar masses causes this portion of the colon to become distended, and to ascend from the cavity of the pelvis into the left iliac fossa. When this occurs, the flexure, in proportion to the rapidity and degree of its distension, begins to turn upon the contracted rectum as upon a fixed point, until at length, like the stomach, it directs its greater arch forwards and upwards, and its lesser backwards and downwards. By this movement the contents are brought somewhat perpendicular to, and so as to bear directly upon the upper extremity or annulus of the contracted rectum, but as their mere weight is insufficient to force a passage downwards, and as this end cannot be accomplished either by such gentle pressure as that exerted by the alternate contraction of the diaphragm and abdominal muscles in ordinary respiration, or by the efforts of the flexure itself, in consequence of its muscular power being so very inferior to that of the rectum, they are compelled to remain stationary, until such time as the increasing accumulation and distension produce a sense of uneasiness sufficient to call into action those great expulsive agents, the diaphragm and abdominal muscles. These muscles, instead of acting alternately, now act simultaneously, compress the abdomen and its contents on all sides, urge the free and floating mass of small intestines downwards, and even into the cavity of the pelvis, so as to press forcibly upon not only the distended sigmoid flexure, but also upon the cæcum and the urinary bladder. By these means the contents of the distended flexure are acted upon in every direction, and so as to be impelled against the upper extremity or annulus of the contracted rectum with a force sufficient to compel the parietes of this intestine to separate and afford a free passage. The nisus now ceases, but as soon as the rectum becomes filled, it is roused to make an expulsive effort, by which the whole of its contents are driven and impacted into the pouch. Here their accumulation produces a great sense of weight and uneasiness in the perineum, an urgent desire to go to stool, and a still stronger nisus, by which the sphincters are forced open and dilated, and the final expulsion of the egesta is effected. But the urinary bladder, although it is subjected to considerable pressure during this process, is not evacuated at the same moment, but immediately after, because, during this the last stage of the process of defecation, the accumulation within the pouch and dilated sphincters presses up the prostate gland against the arch of the os pubis, and thus effectually prevents the flow of urine, until the accumulation is removed. The evacuation of the rectum and bladder being completed, immediately the nisus ceases, the rectum and the sphincters return to their former state of contraction, the diaphragm reascends, carrying with it and restoring to their proper situations the liver, the stomach, the spleen, the small intestines, the cæcum, and the ascending, transverse and descending portions of the colon. But the inferior portion of the sigmoid flexure is differently situated. Having a remarkably long and free process of peritoneum, and being empty, it is compelled, during the last expulsive nisus, to occupy part of the space which the evacuation of the bladder and rectum leaves in the cavity of the pelvis, and must of necessity remain in this situation, until it becomes again distended; because, as a mere glance will show, the manner in which the peritoneum connects the small and large intestines with the diaphragm is such, that from the descending portion of the colon being bound down to the abdominal parietes, this is the only portion of the intestinal canal which does not follow, and is not in the least influenced by the action of the

diaphragm. This is the fact which induced me to assume that the situation of the empty flexure in the living body, is the same as that in which it is uniformly found after death." 23.

The passage of the excrementitious matter from the cæcum to the sigmoid flexure is the next subject of demonstration, and we suspect that our readers will not consider the author quite so happy in his explanation of this process. We shall therefore again let Dr. O'B. speak for himself.

"The excrementitious matter passing from the ileum into the cæcum, becomes accumulated in the latter intestine, and prevented from being moved upwards, from a variety of causes, among which may be mentioned the very acute angle at which the ileum enters the cæcum; the greater size and capacity of the cæcum compared with the ileum which enters, or the ascending colon which leads from it; the long course which the ascending colon takes against gravity; and the absolute necessity of the cæcum becoming filled before it can either be excited to or supported in any expulsive effort. But there is obviously another and a still more powerful cause than any of these for accumulation in this situation. *It is this, while the solid and fluid portions of the excrementitious matter are filling the cæcum, the gaseous portion, not being subject to the same laws and disadvantages, ascends into and ultimately fills to distension all that space intervening between the cæcum and the sigmoid flexure, and by the pressure which it exerts, as effectually prevents the ascent of the contents of the former intestine as the introduction of air into the tube of a barometer prevents the ascent of the mercury.*

Although thus difficultly and peculiarly situated, the contents of the cæcum are transferred to the sigmoid flexure by a very simple process, which is this. From the above causes, the accumulation of flatus in the colon increases, until at length the great expulsive agents are called into action, and the bowels evacuated in the manner just described. One of the great impediments, the flatus, is thus removed, but at the same instant of time that this is effected, the diaphragm and abdominal muscles are not only compressing the cæcum in the way already mentioned, but also propelling the contents of the small intestines into the already distended cæcum in considerable quantity, and with a force at once sufficient to excite this intestine to an expulsive effort, and compel its contents to ascend and occupy the vacant space above it; and once put thus in motion, the mass is easily forwarded by the action of the diaphragm and abdominal muscles, aided by that of the intestine itself, into the descending colon, from whence its descent into the flexure is comparatively easy and obvious. As a proof that this is rarely the process by which the cæcum is unloaded, and the flexure filled, and that it is one which is not slowly, but very quickly, completed, I shall now state a few facts with which the nature of my examinations into the state of the rectum in healthy persons has made me acquainted. In the course of these examinations, it often occurred that on passing the gum elastic tube into the flexure, the escape of flatus, but not of fluid feces, the unresisting feel communicated to the hand, and the unsoiled appearance of the instrument, when withdrawn, satisfied me that no feces were then in the flexure; yet, on reintroducing the instrument in four or five minutes after, I almost uniformly found that more or less fluid feces passed through it, that its upper extremity was coated with solid feces on being removed, and that the person discharged a solid stool soon after.

In arriving at this stage of the subject, evidence has been adduced which appears to bear me out in concluding, first, that the cæcum is considerably distended before it is unloaded; secondly, that the whole of the mass by which it is distended, and no more, is transferred at each time that it is unloaded; thirdly, that at the moment of going to stool, there is generally one mass of fecal matter in the cæcum and another in the sigmoid flexure, and consequently that these may be considered as the measure of the quantity discharged when the bowels

re said to be freed; *fourthly, that as two distinct acts of expulsion are always quired before a healthy person finds his bowels sufficiently freed, the capacity of the cum may be received as the measure of that of the rectum.*"

The compression and detention of the fæces in the cæcum by the confined gases in the arch of the colon, is certainly a novel idea, if not an ingenious one; but we apprehend that the extrication of the gases from his neutral ground is not confined entirely to the time of defecation, or else our auditory and olfactory nerves have often deceived us. That the contents of the caput coli only move forward to the sigmoid flexure, when the latter is emptied into the rectum, thus forming the second edition of defecation, we will not positively deny, though we candidly confess that we are not prepared to admit its correctness. The fact, if constant, of there being two or even three distinct portions of fæces evacuated at each period, would not prove this position, since the same phenomena might be expected from two or three different expulsive efforts of the rectum and sigmoid flexure alone. The head and the body of a child are not usually expelled by a single effort of the uterus and abdominal muscles. Moreover, in healthy and natural defecation, the whole consists, very frequently, of one long and connected cordon of solid fæces. Whoever has had the curiosity to attend to this rather unsavoury, but philosophical subject, on the banks of the Ganges or other streams in India, or on the gangways of a ship, on a long voyage, while contemplating the blue waters rushing along the sides of the vessel, must have had numerous opportunities of confirming this last observation. Again, those who have attended to this subject, must have had ample demonstration, during the operation of purgatives or lavements, that the transverse arch of the colon is not always occupied by air alone. The scybala that so frequently present themselves on such occasions, shew that the cells of the colon are too often and too long inhabited by lazy and unprofitable tenants.

But Dr. O'Beirne has placed himself, we think, in a very awkward dilemma. He tells us that the contents of the cæcum are kept from ascending up and along the colon by the confined gases, till the contents of the sigmoid flexure are evacuated, when the gas escapes, and *then* the cæcum is evacuated, and its contents sent forward and evacuated also by the expulsive efforts. Now he has not shewn us how the sigmoid flexure of the colon gets its *first* cargo of contents every day!! We cannot conceive how the author can extricate himself from this embarrassment unless he maintains that the contents of the cæcum, when transferred to the sigmoid flexure, remain there till next evacuation. This cannot be his meaning, according to the passage marked in Italics, respecting the "two distinct acts of expulsion," at each complete process of defecation.

It might not be very difficult to maintain that the cæcum is a kind of cess-pool, whose contents daily overflow into the transverse arch of the colon, where there is a series of smaller cess-pools (the cells of the colon) still farther to delay the fæces for the extraction of any nutritious particles, till at length the sigmoid flexure of the colon, and the rectum became charged and stimulated to expel their contents.

From physiology our author naturally directs his attention to pathology, the knowledge of which is essential to the success of therapeutics. He justly observes that irritation in the digestive tube itself—in either of its

nervous centres—or in organs with which the tube sympathises, may be so mild as merely to hasten the process of defecation, in the form of slight diarrhœa—and if in a higher degree, the effect will be felt most in that part of the tube which is most muscular and excitable. Such effect he thinks will chiefly appear in the rectum, already in a state of contraction, and now having its contractile force augmented—hence constipation of the bowels more or less in degree.

"If the constipation proves obstinate, the patient feels perhaps no inconvenience, and continues to indulge his appetite as usual, until, at length, the cæcum and colon become so distended, that they can no longer admit the contents of the ileum, and then pain in the bowels, severe twisting round the umbilicus, vomiting, and, in short, the symptoms of colic ensue. If this state be suffered to continue for a certain length of time, the solid, fluid, and gaseous contents soon cease to find an entrance into the colon, accumulate in the ileum and other small intestines, rouse these intestines and also the abdominal muscles into strong action, and thus finally become the cause of their own expulsion by the mouth, the only direction in which they can pass, or encounter least resistance. In this way, and without in any manner recurring to the gratuitous assumption of an inverted or antiperistaltic motion taking place, stercoraceous vomiting is superadded to the other symptoms, and colic is converted into ileus or ileac passion. Lastly, if the patient be not relieved from this state, he will either die, exhausted by excessive pain and debility, or the following series of effects will be produced: the distension of the whole of the intestinal canal goes on increasing, until the laminæ of the mesentery become forcibly separated just as they go to invest the intestines, and the sub-serous tissue is either unnaturally stretched or torn; this tissue soon becomes the seat of inflammatory action, and thus, according as this action may extend itself along the mesentery, or confine itself to the serous coat of the intestines, will ileus be converted into either peritonitis or enteritis." 29.

The chief obstruction is considered by our author as existing at the upper part of the rectum, between the pouch and the sigmoid flexure of the colon, and this point he conceives to "be much more exposed to both mechanical and chemical irritation than any other part or point of the intestinal canal."

"Indeed, when we consider how frequently accumulations take place in the flexure from the common but pernicious habit of disobeying natural calls to stool; how commonly stimulating and improper articles of food, and the most drastic medicines are used; and how often the hepatic and intestinal secretions become, from these and a variety of other common causes, of a highly vitiated and irritating nature, it is scarcely possible not to admit that this particular part of the intestine is in a very constant state of excitement and spasm. Hence it is, that spasmodic stricture is of such frequent occurrence in this particular situation; and that constipation is so general a feature of disease. It is in this way also that the narrow neck or contraction so often observed, in subjects of all ages and of both sexes, at the extreme termination of the sigmoid flexure, is to be explained, and not by considering it the result of congenital malformation, as Mr. White of Bath, and, more recently, Mr. Salmon and Mr. Calvert of London, agree in believing. Previous to the formation of spasmodic stricture in this situation and in this way, that particular part of the mucous membrane which lines the stricture, is far more exposed than any other to the irritation arising from the weight, impulse, and perhaps acrimonious nature of the contents of the flexure; but it becomes still more and more exposed after the formation of the stricture, until at length it is excited to a mild kind of inflammatory action, which soon extends to the corresponding portion of the muscular coat, but is prevented from extending further by the effusion of coagulable lymph, and the formation of adhesions be-

tween the two coats; thickening and, of course, coarctation of the parietes of this part of the canal follow, and thus spasmodic is converted into organic stricture." 33.

Time, he thinks, and natural predisposition concur, in giving a tendency to such a state to degenerate into a scirrhous and malignant structure. This state is accelerated, he thinks, by the pressure of accumulated masses in the sigmoid flexure of the colon, obstructing the return of blood from the hæmorrhoidal vessels.

Besides the forced state of contraction in the rectum, as a cause of costiveness, there are others, our author observes, such as strangulation or invagination of portions of the intestinal canal—the presence of intestinal calculi—collections of fruit-stones in the bowels, forming nuclei for concretions—a retroverted, scirrhous, or a gravid uterus—the formation of large tumours external to the rectum, besides many others growing on its internal surface. All these act, in a great measure, mechanically, and their removal or mitigation require various and different modes of treatment.

The colon, Dr. O'B. remarks, is rarely found to be the seat of obstruction. The contractions which we sometimes see in this gut are, he thinks, not seldom the "effect of the purging which so often occurs, either immediately before or *after* death." This is surely a forced, as well as fanciful conclusion. The following is more rational.

"But if the descending colon should happen, from any cause, to discharge into the sigmoid flexure a greater quantity of matter, and in a more rapid and sudden manner than usual, the latter, by making a sharp and nearly complete turn upon its own axis, may become so twisted as to cause a very perfect and formidable species of obstruction. It is obvious, however, that the twist so formed is not likely to occur near to the rectum or fixed point, or in the distended portion above it, and that it will take place much more frequently at the upper and less distended portion of the flexure. It is also obvious that this twist could not be produced in the first instance, nor, in the next, exist for a longer time than the expulsion of the offending matter would require, if the rectum did not remain contracted, and firmly oppose the escape of the contents of the flexure." 42.

Although the mucous membranes are much more prone to ulceration than adhesion, yet the adhesive effusion occasionally takes place in the rectum during a highly-inflamed state. But before the adhesion can acquire consistency, the contents of the colon, from above, either completely break up the effused lymph, or extend it into the form of membranous filaments, crossing each other, as chance may determine, in various directions.

"In this manner is formed that kind of filamentous network which has been occasionally found in the rectum, and which, although it permits the escape of all the fluid feces and flatus, effectually obstructs the discharge of all solid excrement, and ultimately causes a sort of constipation which requires the obstructing filaments to be divided before it can be removed. One of the most remarkable instances on record of obstruction from this cause will be found detailed by M. Renauldin, in the Dictionnaire des Sciences Medicales, article 'Constipation.' It appears that the subject of it, a medical officer of the French navy, had suffered severely from obstinate constipation since his birth and up to the forty-fourth year of his age, when it caused his death; and that, on examining the body, the anus was found excessively dilated, the cavity of the rectum crossed by a fibrous partition situated a little above the anus, and that above this again the rectum and the other intestines were so enormously enlarged as to fill the cavities of the pelvis and abdomen, and to contain thirty kilogrammes, or more than eighty

pounds, apothecaries' weight, of a blackish brown, pultaceous, and offensive matter." 44.

The pendulous position of the belly in advanced age, and the weakness of the expelling muscles, contribute also to constipation. The compaction of hardened fæces in the rectum, our author thinks, is very rare, and only observed in paralytic or very aged, infirm, and sedentary persons.

Mr. Copeland has described another cause of constipation—hypertrophy of the sphincter muscle, with inflammation, causing a most painful disease, the involuntary contractions of the sphincter being compared to the pains of labour.

"They frequently come on immediately, but more usually about an hour or more after each evacuation, and sometimes continue till the succeeding one; in some instances the complaint goes on to produce suppuration, and consequent fistula; sometimes the irritation is propagated to the neck of the bladder, and produces a retention or impediment to the urine. I have seen it, in two cases, extend up the canal, and give rise to attacks of violent colic, and an increased secretion from the whole inner membrane of the gut, so that an evacuation of mucous cylinders, of the size of the part of the canal where they are formed, or of detached pieces of mucus, are seen mixed with the feces; yet all this has been finally removed by the bougie. I have seen it followed by a constant evacuation of shreds of coagulable lymph, which has continued through life, and produced the greatest distress. When this substance accumulated in the bowels, it was accompanied with pain, which continued until it was discharged." 51.

The principal means of relief are opium and the bougie. Dr. O'B. conceives that all Mr. Copeland's cases afford evidence of stricture at the upper extremity of the rectum, and of great irritability and sensibility, not merely of the sphincters, but of the whole bowel. The bougies, in Mr. C.'s cases, were usually passed up six or seven inches. Dr. O'B. does not mean to deny the existence of spasmodic stricture of the sphincter ani, as an independent affection, since Baillie, White, Dupuytren, Boyer, Colles, and many others have settled that question; but he maintains that the recorded descriptions of such cases do not shew that they were attended by constipation.

"It appears then from all that I have said and advanced on the subject, that, with the exception of the comparatively rare instances in which alvine obstruction is the consequence, either of the cavity of the rectum being traversed by membranous filaments, impacted with indurated feces, filled by tumours and other excrescences, or obliterated by the pressure of tumours or of displaced or morbidly enlarged organs external to it, constipation is invariably an effect, and nothing more or less than an effect of an unusually contracted and impervious condition of the rectum, produced by a more than usually firm and strong action of its own powerful and highly irritable muscular parietes, and maintained by a variety of favourable circumstances already explained. And it does not appear that even that species of the affection which arises from twisting of the sigmoid flexure, forms an exception to this general rule." 54.

He now proceeds to the curative indications and treatment of constipation, confining his observations to the disease as it arises from ordinary causes.

Assuming, then, that the rectum is contracted, and the colon distended with fæces and flatus, the obvious indication, he observes, in the treatment of constipation, "is to mechanically dilate the rectum, so as to open and form a free communication with the colon, and thereby not only give exit, but

circulation to the matter so confined." This plan of treatment, he avers, will be found to exceed all others in the important points of safety, certainty, and expedition.

"This plan consists, as the reader must have long since anticipated, in the introduction of a large sized gum elastic tube through the anus into the sigmoid flexure of the colon, and, after giving exit to such flatus and fluid feces as may happen to escape, adapting to it a proper syringe, and throwing up such purgative fluids as circumstances may make it necessary to select. The first instrument that I employed for the purpose of dilating the rectum, was a gum elastic catheter of the largest size; the next was the tube of the stomach pump; but I soon found that these, in consequence of having eyes at the sides, but no opening at the point of their upper extremity, caused the fluid to be expended on the sides, and not driven to a sufficient distance up the cavity of the bowel; accordingly I cut them across below the eyes, and in this state used them, having first rubbed oil into the cut surface. Of late years I have been in the habit of using an apparatus, which consists of two gum elastic tubes and a brass syringe, and may be described thus: one of the tubes is of the largest size, eighteen inches long, open at both ends, bulbous at the upper extremity, and has, at the lower, a brass ferrule made to receive and accurately fit the short pipe at the end of the syringe. The other tube is by one-third shorter, and, in all respects, the same as that attached to the horizontal pipe of the stomach pump. The syringe has, on one side, a spring lever so constructed, that, when firmly pressed upon, it turns a simple stopcock, and forms a communication between the chamber and the short tube at the extremity, while it closes that which had previously existed between the chamber and the short tube situated at one side; in short, it is Weiss's syringe, as improved by the late William Lloyd, an obscure London artist, who added the spring lever, an addition which has perfected, and greatly increased the facility of working the instrument. The manner of preparing and using this apparatus is very simple. If the tube has been kept in a warm situation, it will not be sufficiently stiff for the purpose, and will, in all probability, become doubled on itself in the act of introducing it. Whenever this occurs, it should be placed for a few minutes in cold water, and afterwards in a current of air, until it acquires the necessary degree of stiffness; its upper extremity is then to be well oiled. The syringe should be placed for a few minutes in warm water, be then removed, and well dried, afterwards have the shorter tube fixed on its horizontal pipe, and be filled with the fluid intended to be injected. In filling or charging it, either the short pipe at the end of the instrument, or the extremity of the short gum elastic tube may be immersed in the fluid; but whichsoever we may happen to use should be steadily kept beneath the surface, in order to avoid the inconvenience of drawing in air. With the same view, also, it will be better to draw up the piston slowly and evenly, than in a rough and rapid manner. The tube and syringe being thus prepared, an assistant is to be directed to hold the basin containing the remainder of the fluid to be injected, and when the syringe is to be recharged, to keep the extremity of the smaller gum elastic tube beneath the surface of the fluid; a chamber-pot is to be at hand to receive any fluid feces that may escape through the tube, and, according to the circumstances of the case, either a close-stool or a bed-pan is to be prepared and ready for immediate use. Having made these arrangements, all of which will be found very useful in their way, the patient is to be turned on his left side, directed to draw up his knees, and the point of the tube, directed by the fore-finger of the right hand, is to be inserted into the anus, which is often so tightly constricted as to make it a matter of some difficulty and requiring some force to effect its insertion. This being accomplished, the instrument is to be directed and firmly pressed upwards, inch by inch, and as nearly as possible in the course of the intestine. If the expulsive efforts be violent, which will oc-

casionally happen, it will be advisable to yield somewhat to them, and take advantage of their intermissions to pass it higher and higher. When it has reached, in this way, the height of eight or nine inches, the opposition to its further passage will be found considerably increased; but instead of yielding to it, the pressure upward must be gradually increased, until such time as the resistance is completely overcome. The moment that this occurs, the point of the instrument passes rapidly onwards, and as if through a very narrow ring, and the escape of either flatus or fluid feces, or of both, takes place, gives immediate and greater or less relief to the patient, and assures the operator that the upper extremity of the tube has entered the sigmoid flexure. But if neither flatus nor fluid feces should happen to escape, at this time, he may be assured that the instrument is blocked up with and embedded in a mass of solid feces. Indeed, the subsequent steps of the operation will remove all doubt of its having been so circumstanced, for, in all such cases there is greater difficulty than usual experienced in discharging the syringe, and the tube on being removed, will be found to have its cavity blocked up, and several inches of its surface coated with feces. The next step is to insert the short pipe at the extremity of the syringe into the ferrule at the lower end of the tube, and by pressing firmly upon the spring lever with the left thumb, and then depressing the piston, to discharge the contents of the syringe into the colon. The degree of force necessary to depress the piston will be found to be moderate, except in the cases just noticed, where the tube is plugged up with solid feces, and embedded in a mass of the same; but even in these, the resistance soon gives way before the impetus of the injected fluid. As soon as the syringe is discharged, the thumb is to be removed from the lever, the point of the shorter tube to be turned into and immersed in the remainder of the purgative fluid contained in the basin, the piston drawn up, the syringe filled, then discharged as before, and so on until all that remains of the fluid is injected. After the first discharge, the patient will express a desire to go to stool, and be very urgent to be allowed to do so after every succeeding one; but the effect will be rendered much more complete by not complying with his entreaties, and persevering until the necessary quantity is thrown up, when the tube is to be slowly withdrawn. The moment that this is done, he will rarely fail to hurry to the night-chair, and discharge a copious and, in many instances, an enormous stool." 64.

Few of our readers, we imagine, will have perused this long detail of operations, without having repeatedly asked themselves the question—is this then the remedy for constipation of the bowels? The operation, in every instance, must require one able surgeon and an assistant! How is this practice ever to become general? How many patients labouring under constipation of the bowels (especially females, who are the most numerous) will submit to it? Not one in one hundred! It is clear that the remedy is only adapted to dangerous cases, where the common means fail, and where the life of the patient is in danger; or, to a few obstinate cases in men, who may be inclined to submit to much trouble and inconvenience to get rid of an obstinate evil.

Dr. O'B. informs us that he has now employed this mode of treatment for nine years, and with decided and unexampled success. This we doubt not; but still we think the practice can never become general, because it cannot be put in execution by the patient. Dr. O'B. next proceeds to the narration of cases in support of his doctrine and practice, some of which we shall condense, as they are far from being devoid of interest.

Case 1. This was a lady about 40 years of age, subject to gout. Our

l her, in February, 1824, with both knees swelled, red, and ceded by nausea, eructation, and loss of appetite. These symp- bated in two days, by antiphlogistics and colchicum. The bow- ned, and the medicines continued. On the fourth morning with intense pain in the region of the stomach, followed by in- iiting. The gout had retroceded from the joints, and she was extremities, with sunken countenance, quick, weak pulse, and in the epigastrium. Bowels not moved since the preceding ' in short, the case was evidently an example of metastasis of stomach, and the patient's life appeared to be in imminent dan- . O'B. endeavoured by enemata, and various other means, to eva- bowels, and assuage the pain and irritability of the stomach—but , though he had the able assistance of Dr. Crampton. As a last arge enema, composed of scammony, jalap, colocynth, &c. was to be thrown up by the nurse; but much force was necessary, ontents returned as fast as thrown up. Next morning a tube was d, and passed up into the sigmoid flexure, as described in the text. serous fluid flowed rapidly from the tube till three imperial pints were discharged. The patient experienced sudden and decided re- ring the remainder of that day and the next, the same kind of inued to be discharged, unmixed with any feculence. She was estored to health.

ks. This case is fairly considered by our author as a metastasis of the mucous membranes of the primæ viæ, producing such a serous as to make it somewhat resemble cholera. We think that few t practitioners will doubt that the immediate cause of this retroces- out to the stomach and bowels, was the colchicum.

2. This is headed "Spinal Irritation," and the subject of it was a dy who, from the pressure of tight stays, became affected with pains ack, shooting round to the stomach and other parts, aggravated by This induced her often to fast for 12 hours, and then eat extremely The bowels became very confined, and she frequently vomited up ate. In December, 1830, the constipation began to resist ene- d other means, and to produce great distress. In May, 1831, she der Dr. O'B.'s care, and affirmed that she had passed neither fæces s for six months, notwithstanding the various means that were em-

his period, her state, in other respects, I found to be as follows: she ed of total want of sleep, and the impossibility of procuring it by arti- ans. The irritability of her stomach was such, that the only sustenance I take, or had taken for two months previously, consisted of a table- of milk and lime-water taken frequently in the day, but vomited up soon as it was swallowed, apparently little altered in quality or di- in quantity. She was very weak, but could walk about with assis- d though thin, not as emaciated as might be expected. No unusual r tenderness on pressure was perceptible in any part of the abdomen, was weak but regular, her tongue covered with a cream-coloured fur, truation, as throughout her illness, regular as to periods, quantity, ty, but attended with severe pain." 78.

From the success which our author had obtained on various other occasions, he confidently promised to remove, not only the constipation, but all the other symptoms. In the latter, however, he failed. The gum elastic tube having been introduced, and nothing coming away, it was withdrawn, and its extremity was found to be covered with solid fæces.

"It being now clear that the sigmoid flexure contained a mass of solid excrement, the tube was again introduced, and in doing so the same difficulty was experienced, and it became necessary to use the same degree of force. Still no flatus passed off. The syringe was now adapted to the tube, and the whole of the injection thrown up. While this was doing, she became very urgent to be allowed to go to the night-chair, but her entreaties were not complied with, until the whole of the fluid had been injected. The tube was then removed, and, in less than two minutes, she passed one of the most enormous stools I have ever seen; it nearly filled a large-sized chamber-pot, was altogether solid, perfectly natural looking, and arranged in remarkably thick coils. Soon after, she expressed herself as being greatly relieved from the spasms which she had so long felt in the stomach and bowels, but complained of feeling a great degree of weakness." 80.

Although considerable quantities of fæces came away next day and afterwards, she continued to pass sleepless nights, and to be harassed with vomiting and spasms—milk, in spoonfuls, being the only nutriment she could take. In short, her situation was worse than when our author first saw her. At length it was discovered that there was a tender portion of spine, from the sixth dorsal vertebra downwards. Leeches were immediately applied, and then blisters, with sensible relief. The tartar-emetic ointment was then rubbed along the spine, and strong pustulation produced. From that time the stomach became retentive—the rectum gradually ceased to offer resistance to the tube—and the necessity for introducing it occurred less frequently. Sleep returned by degrees, as did strength. She is now in robust health.

Remarks. This case is certainly very interesting and instructive.

"Morbid irritation conveyed directly from the spinal marrow, through the medium of one of its offsets, the hæmorrhoidal nerve, to the rectum, caused that intestine to contract in a powerful manner, and in this way produced such an accumulation of feces in the sigmoid flexure of the colon, as would, no doubt, have ultimately produced ileus or colic, or perhaps enteritis, if the state of the patient's stomach had not incapacitated her from taking any greater quantity, or any other kind of food. That such was the cause of the singularly obstinate constipation which prevailed, and the precise mode in which it was produced, is obvious from the different states in which the rectum was found before and after the discovery and removal of the irritative condition of the spinal cord; and as to the other phenomena of the case, the irritability of the stomach and spasms of the abdomen, they are at once explained by the intimate nervous connexions which the spinal cord is known to have with the parts so affected." 83.

CASE 3.—*Mania.* This case was communicated to our author by Dr. M'Dowel, one of the surgeons of the Richmond Surgical Hospital. A young lady, whose catamenia had become suppressed, attempted to cut her throat on the 21st of February, 1830. The bowels being constipated, purgatives were ordered, and acted freely. She remained sullen for several days, and

then became violent, with constipated bowels. Calomel and colocynth failed to act, as did castor oil and purgative draughts. Enemata, exhibited in the usual way, failed also. After seven days of obstinate constipation, the tube of the stomach-pump was passed up into the sigmoid flexure of the colon, when a loud burst of flatus, followed by large discharges of liquid fæces, took place, with decided and general relief. From this period she recovered rapidly and perfectly.

Case 4.—*Narcotic Poisoning.* To a boy, 6 years of age, a cup of what was considered to be senna tea, was given to open his bowels. He immediately cried out that he had got the cholera—became delirious, convulsed, and attempted to bite himself and others. A similar dose had been given to one of his sisters, followed by similar symptoms, which ceased on full vomiting taking place. It was now ascertained that, instead of senna, the herb and seeds of stramonium had been exhibited. An emetic was therefore quickly given to the boy, producing copious vomiting; but without any sensible relief. The next object was to free the bowels, and fortunately our author had with him his improved self-injecting apparatus. The tube being introduced, and a purgative enema having been thrown up, "a great quantity of flatus and of solid dark green fæces was discharged." This measure, with some others of a general nature, produced decided and permanent relief.

Remarks. Although this case is interesting in itself, we do not think it proves much in the question agitated by the author. There is no proof that an enema exhibited in the usual way would not have been equally successful.

Case 5.—*Abdominal Tumours.* An aged gentleman, accustomed to hunting and field-sports, gradually lost his appetite, became costive, flatulent, and unusually prominent in the abdomen. At length, a tumour appeared in the left side, which increased in size and became painful. Upon careful examination, our author came to the conclusion that it consisted of indurated fæces. He accordingly introduced the tube, and threw up a turpentine enema. Some flatus and hardened balls of fæces came away. Purgatives were then exhibited by the mouth: but no relief was obtained. Another medical gentleman now joined in consultation, and disagreed with our author respecting the nature of the tumour, and recommended external friction, in addition to purgation. This plan also failed, and surgeon Crampton was added to the list of consultants. He agreed with Dr. O'Beirne, and croton oil was exhibited, with other purgatives. By steady perseverance, several scybala were dislodged daily, not much larger than peas, the tumour gradually lessening in size, and eventually disappearing on the evacuation of a large lump of excrement, followed by a quantity of fluid fæces. He was much relieved—treated afterwards by purgatives and tonics, and returned home in tolerable health soon after.

Remarks. We have been often deceived by these congregated masses of hardened fæces in the colon, and have taken them for organized tumours of a much more formidable character. The same mistake is made by others, and we have no doubt that cures are often attributed to men and measures, where little real credit is due to one or the other.

CASE 6. This was a young gentleman who had been long in bad health, and whose digestive organs were in a highly disordered condition. The primary history is too long for detail, and we shall come at once to the period when he was taken charge of by our author. This was on the 21st Oct. 1831.

"His countenance was then anxious and sallow, his pulse regular, but weak, his tongue covered with a brown fur, his urine scanty and high-coloured, and stained the chamber-pot of a delicate pink colour. He had had no discharge of any kind from his bowels for forty-eight hours, and, for several days before, he regularly vomited up every thing he ate or drank in about twelve hours after it had been swallowed. On examining the abdomen, which was found to be greatly swelled and tympanitic, yet not in the least painful on pressure, he directed my attention to a tumour of the size and shape of an orange, situated in the left iliac region, near to the anterior superior spinous process of the ilium, and extending above and below this process. It was very moveable, firm, hard, rather unequal, free from pain, and easily embraced by the fingers and thumb. He complained of 'frequent rumbling of wind in the bowels, which he could not expel, and which seemed to be stopped at the tumour,' and also of a sense of weight and uneasiness in the lumbar regions. My first step towards his relief, was to pass the tube into the colon. This being effected, but with unusual difficulty, a considerable quantity of wind, and some fluid feces escaped, and gave him such relief that no injection was thrown up, and he was directed to take a drop of croton oil immediately, to have a large belladonna plaster applied over the abdomen, and to take, at bed-time, a diuretic draught, composed of two ounces of infusion of juniper, a drachm of nitrous æther, and a scruple of acetate of potash." 100.

For two or three days he seemed rather better, but on the 25th he was worse than ever. The tube was again passed with difficulty. A quart of warm water was thrown up and retained. Suddenly the patient raised himself in bed, and seemed to be dying, from some violent internal struggle. In a few minutes, the stomach discharged more than three quarts of semi-fluid feculent matter. When the vomiting ceased the pulse rose—he took some brandy—and had a tolerable night. He expired the next day, during a fit of vomiting.

The following were the appearances on dissection.

"The stomach, duodenum, jejunum, and the two upper thirds of the ileum, enormously distended with fluid feces, but no morbid alteration of their coats, except at a point to be mentioned hereafter. The lower third of the ileum, the cæcum, the whole of the colon, and the rectum, as far as its pouch, contracted to the greatest possible degree, but also free from any morbid condition of their coats. A large tumour, situated in the upper part of the left iliac fossa, and formed by a remarkably thick layer of firmly organized coagulable lymph enveloping, first, a turn of the ileum greatly thickened in its parietes, for nearly the extent of two inches above the commencement of its inferior third; secondly, about two inches of the sigmoid flexure in a highly contracted but perfectly sound state. In the interior of this turn of the ileum, and on that side of it next to the sigmoid flexure, a circular opening lined with a dark red fungous membrane, large enough to admit the thumb, and leading into a kind of cavity situated between the ileum and sigmoid flexure; and the passage from the upper portion into the lower third of the ileum so narrow as scarcely to admit a good-sized quill. All the other viscera of the abdomen and pelvis perfectly sound." 103.

Our author next makes some observations on strangulated hernia. With few exceptions, he conceives that "strangulation is always caused by the

prolapsed portion of intestine becoming so distended, generally by the gaseous, and very rarely by the fluid or solid contents, as to be pressed forcibly against the margins of the opening or ring, and to be no longer capable of re-passing through it, and returning into its natural situation in the cavity of the abdomen." After passing some strictures on the application of ice—bleeding—and tobacco enemata, our author proposes his own remedy.

"The question, therefore, proposes itself, is there any other more certain mode of accomplishing this object, that has not been either proposed or tried, and that is, at the same time, free from all objection? It appears to me that there is. It is this. To introduce a gum elastic tube into the colon, and to leave it there until the large intestines, and eventually the hernial tumour are emptied of their gaseous contents. If the bowels happened to be well freed, or to contain but a small portion of solid feces, at the time the strangulation took place, success might reasonably be expected from this mode of proceeding; and if they happened to be loaded with solid matter at that time, it would only be necessary to introduce the tube more frequently, and at intervals of a few minutes between each introduction, first, to empty the sigmoid flexure; secondly, the cæcum; thirdly, the hernial tumour, in order to effect the object in view." 113.

As it is but recently that Dr. O'B. adopted this idea, the facts which he is able to offer are not numerous. As the subject is important, we shall condense the greater number of these into as small a compass as possible.

Case 8. A female, 20 years of age, was admitted into the Jervis Street Infirmary, 16th August, 1831, with the following symptoms.

"On the right side, immediately below the pubal attachment of Poupart's ligament, and slightly ascending over this ligament, she has a tumour which is as large as a walnut, tense and painful, yet not discoloured. It imparts all the feel of an entero-epiplocele, and is attended with the following symptoms, viz. anxious and painful expression of countenance, jactitation, nausea, vomiting, constipation of four days' duration, pain on pressure of the abdomen, particularly over its umbilical and hypogastric regions, tongue brown at its base and along its centre, great thirst and heat of skin, pulse 100, hard and contracted. She states that at 9 o'clock on Sunday morning the 14th, she had been pumping water to supply her master's house; that at 2 o'clock in the afternoon, she was seized with sickness of stomach and violent pain in the belly; that she vomited repeatedly during the evening, retired early to bed, and there for the first time, discovered a tumour in her groin, and pain and difficulty in extending the right thigh and leg. She adds, that she went the following morning to the next apothecary, who gave her some pills and an injection, but without affording any relief. The apothecary she mentions has had the humanity to attend her to the hospital, and this gentleman states, that, suspecting the nature of the case, he gave her pills of calomel and cathartic extract, and a tobacco enema, and that he could not be deceived in asserting that he saw her vomit stercoraceous matter. It does not appear, however, that she has had what could be considered as fecal vomiting since her admission into hospital." 116.

She was bled ad deliquium, had tobacco enemata, and the taxis was employed for some time without effect. The tube was then passed into the colon, when a considerable quantity of flatus escaped, with great diminution of the hernial tumour, which now appeared to be chiefly omental. Nausea and vomiting ceased—the pain was inconsiderable—and a mild enema was administered by the tube. In half an hour the tube was re-introduced, and

then came away a pint of fœtid fluid fæces. Repetitions of the enema with cathartics by the mouth completed the cure.

Dr. O'B. quotes a case from Mr. Copeland's work on the Rectum, in which a strangulated hernia was quickly reduced by the operation of dilating the rectum for the removal of a stricture. We shall quote the case.

Case 9. "A lady, about 40 years of age, who had been affected with an umbilical hernia for many years, was seized with violent pain in the abdomen and vomiting, and had not had any evacuation from the bowels for seven days. The rupture was painful to the touch, was of the size of a very large orange, and had been incapable of reduction for twenty-four hours. Her pulse was quick and weak; she had been taking large doses of calomel and other strong purgative medicines, without effect. In this state Mr. Ford was called to her, and I saw her with him; the rupture could not be returned by any effort that was thought prudent, and the vomiting, together with hiccough, was increasing in severity; she was bled, and directed to take some pills, with calomel and extract colocynth; and an injection of the tobacco fume was, with considerable difficulty, thrown up the rectum. It was proposed, that if these means failed of giving her relief, the operation to return the hernia should be performed without further delay.

She now happened to tell us, that she had been for many years of so costive a habit of body, that she could never pass her stools without great pain and difficulty, and seldom without the assistance of glysters, and that they were always very small in size.

These circumstances led to a suspicion that the seat of the disease was not in the hernial sac, but in the rectum; and, on passing the finger to examine the gut a firm indurated stricture was discovered about two inches up the intestine, which would not admit the point of the finger to pass it.

A rectum bougie, of a small size, was introduced high up the gut, and retained there about ten minutes. Soon after it was withdrawn, there was a copious evacuation of the fæces, the vomiting ceased, and the rupture soon returned spontaneously; in short, all her complaints disappeared, and she was in the same state as before the attack. By persevering in the use of the bougie, the stricture gradually enlarged, and in a fortnight she could pass her stools better than she had done for many years: she continued, however, daily to pass the bougie for about a month, and then used it only occasionally. This is now seven years ago; and I saw her very lately for another complaint, when she informed me, that she remained perfectly well of the stricture; but from fear of a return of her disease, rather than from necessity, she now and then passed the bougie, for a short time, and withdrew it again." 126.

The reader has now before him all the information on the subject which has come within his reach, and he hopes that the facts and reasonings will be sufficient to induce him to give the plan a full and fair trial—also that he will not condemn it, should it fail in those cases where the neck of the sac is found to form the stricture—where the strangulated intestine is adherent to the sac, or filled with indurated fæces—or where the case is merely one of epiplocele.

"The proposed plan can do no injury whatever, causes little or no delay to the employment of other means, and may be tried immediately after a reasonable attempt at the taxis has been made, and has failed. Should the first introduction of the tube not give exit to either flatus or fluid feces, and should the peculiar feel communicated, as well as the previous history, lead us to suspect the presence of a solid mass of feces in the sigmoid flexure, the enema catharticum, with the addition of an ounce or two ounces of castor oil, should be

thrown up, in order to bring away this mass. If after the bowels have been moved, no favourable change takes place in the hernial tumour, the tube should be again introduced, and if the same happens, the same process should be gone through, and repeated until the bowels are completely freed. Once this object has been accomplished, it is to be presumed that another introduction of the tube will either enable the intestine to return proprio motu, or place it in a situation to be returned by the taxis." 128.

He does not recommend the tobacco enema on these occasions, as he thinks it does more harm than good, by paralyzing the muscles of expulsion.

Case 10.—*Colic.* We shall give this case in the author's own words, as it is short.

"Late in the evening of the 6th of Sept., 1826, the servant of Mr. W. K., of Mecklenburgh-street, called to request my immediate attendance on his master, who was, he said, 'dying from cramps in his stomach.' I found the gentleman sitting up in bed, doubled forwards, and complaining of the most acute pain in the epigastric region; his countenance was pale, contracted, and expressive of great agony, and his pulse scarcely to be felt. On inquiry, I found that his bowels had not been moved for many days; that he had been subject for years to attacks of what he called cramps in the stomach; that brandy, laudanum, æther, and other such remedies, had always relieved him; but that, on this occasion, he had had recourse to them without experiencing the slightest relief. Having brought the tube with me, I proceeded at once to pass it up the rectum. The obstruction to its passage was inconsiderable until it reached the height of eight or nine inches, when it became necessary to press up the instrument much more firmly, in order to make it enter the colon. The moment that this was effected, a burst of flatus took place through the tube: the patient instantly exclaimed, 'I am quite relieved,' and both his look and manner declared that this was the case. No injection being at hand, the tube was withdrawn, he was directed to take a purgative draught, and to have a fetid enema administered as soon as possible. Soon after, his bowels were freed, and he was perfectly well the next day. From that period to the present, I have ascertained that he has not had any return of the cramps, although, according to his own account, he had previously been accustomed to have two or three attacks of them every year." 132.

A case of enteritis is next related, in which the tube gave relief after several other and powerful means had failed. Some other cases of the same are communicated by friends.

Case 11.—*Puerperal Fever.* The following case was communicated to our author by Mr. Gregory, Master of the Coombe Lying-in Hospital.

"Johanna Barnard, aged 25, was carried to the Coombe Lying-in Hospital, on the 5th of March, 1828, labouring under such severe pains in the groins, and all over the abdomen, especially about the umbilical and hypogastric regions, as to be unable to bear the slightest pressure. Pulse small and difficult to be felt; countenance extremely anxious; great prostration of strength; bowels confined, great thirst, &c. States herself to have miscarried a few days before, in the fourth month of pregnancy, and says that she was previously strong and healthy. Twenty ounces of blood were taken immediately from the arm; an enema of turpentine; abdomen to be constantly fomented; three grains of calomel and a quarter of a grain of opium to be given every hour; enema to be

repeated in three hours, and if no stool takes place, to have a castor oil and turpentine draught.

6th. Feels somewhat easier. Has had no stool. Pills, enema, and draughts to be continued.

7th. Passed a restless night, had one or two scanty motions; mouth sore, and in great pain; passed the œsophagus tube nearly its whole length up the anus, and through it injected five or six pints of warm water, some oil, and about a wine glassful of turpentine. In a few minutes after withdrawing the tube, an enormous quantity of feces came away, giving immediate and decided relief." 144.

Other cases of similar tendency are communicated by Mr. O'Hara, resident accoucheur of the same establishment.

DYSENTERY.

Dr. O'Beirne has dedicated a considerable space to this disease, tracing the opinions of physicians respecting it from Hippocrates downwards. To these worn-out subjects we need not allude. All are now agreed that, when dysentery proves fatal we find inflammation and ulceration in some portion of the intestines. The ulceration is, of course, the consequence of inflammation—and the inflammation itself is but a secondary link in the chain of causation, there being first an increase of irritability in the lining membrane of the bowels, followed by an afflux of blood to that surface, and a great augmentation of secretion. We agree with Dr. O' B. that a very general opinion prevails, that dysentery is an inflammation of the lining membrane of large intestines only. But the opinion is unfounded; for inflammation, and even ulceration, are very frequently, if not always, found in the ileum, especially about its lower portion. The following rationale of dysentery is not new, as it is taken almost entirely from the writings of modern authors, who have treated of the disease in hot climates.

"When, as frequently occurs in autumn and the latter end of summer, a person becomes first heated, and then exposed to cold, or, which is still more frequent and influential, to cold and moisture combined, the temperature of the surface of the body is considerably cooled down, the flow of blood to, and the secretion from this surface are checked, and the consequence is, that an unusual quantity of blood is determined to the interior of the body. But this blood is not determined to any other tissue than the mucous, because, as it would appear, this tissue is but a modified continuation of, and, of all others, the most closely allied, in structure, function, and sympathy, to the skin, for which the refluent blood was originally destined. Again, this blood is not determined to the mucous membranes of the mouth, nose, fauces, pharynx, lungs, or genito-urinary organs, but to those of the liver, stomach, and small and large intestines, which are obviously infinitely more exposed to, and perhaps at the time actually labouring under, derangements which render them less capable of resisting, and more prone to receiving the tide of blood thus diverted from its natural direction. This is the congestive stage, and it marks the rigor, paleness, inappetancy, eructation, and nausea, with which the attack generally commences. The presence of such an unusual quantity of blood in these organs, destroys the equilibrium which previously existed between their vascular and nervous systems, and eventually the latter becomes excited proportionally with the former. This is the irritative stage, which so shortly precedes the inflammatory, and is only marked perhaps by the irregular and wandering pains complained of before those termed 'tormina' set in. During both these stages,

there is, most likely, little or no effusion of blood, and the hepatic and intestinal secretions are arrested; but the third stage is quickly developed, and the whole of the mucous membrane of the digestive canal, from the pyloric, if not from the cardiac, orifice of the stomach to the anus, as well as that continuation of it which lines the biliary and pancreatic ducts to their minutest and most remote ramifications, are attacked with inflammation, and become highly and morbidly sensible. From this extensive surface blood is now copiously effused, and the hepatic, intestinal, and perhaps pancreatic, secretions become increased in quantity, and highly vitiated and irritating in quality. These secretions, as well as the morbid state by which they were produced, rouse the muscular parietes of the small intestines into activity, and cause them to hurry forwards their multifarious contents,—namely, alimentary matter, blood, air, and vitiated hepatic and intestinal secretions, towards the large intestines; but in their passage through the small, they necessarily create great tormina and suffering, for the containing parts and their contents no longer bear to each other the same inoffensive relation as in health, the former being much more sensible of irritation, and the latter much more irritating." 157.

The contents having passed the valve of the colon, Dr. O'B. thinks that they there become very differently circumstanced, and in a manner which requires to be clearly explained. The following is the exposition given by our author, and which he considers a tolerably accurate one.

"At the time of the attack of the disease, the rectum is, as it always is, except for a few minutes before stool, firmly and imperviously contracted; but during the irritative and inflammatory stages, it becomes, according to the principle already laid down, still more powerfully contracted; and the consequence is, that with the exception of a very small quantity of flatus, blood, and mucus, which occasionally escapes per anum, there is complete retention of the alvine contents. In fact, as far as retention of both solid and fluid feces, the bowels may be said to be as completely constipated at the early period of the disease, as they are in enteritis, for the discharges from them are then very rarely seen even tinged with fecal matter. Again, at no period of the disease is there any evidence whatever of the ileo-cæcal valve performing its office imperfectly, for if it were even true that the action of this valve may be inverted, it is certain that the stercoraceous vomiting, the supposed test of the occurrence, has never yet been observed in dysentery. Such being the state of the facts, it follows that the contents are admitted to pass freely, through the ileo-cæcal valve, —that their exit per anum is prevented by the rectum,—that their return into the small intestines is prevented by the ileo-cæcal valve, and, consequently, that once they have entered, they are are forced to remain pent up within the cæcum and colon; and that the combined effect of the peculiar structure and functions of the valve and rectum, is such as to subject these portions of the large intestines to the operation of a principle of accumulation, which is always more or less in activity. These facts have been already noticed, and are equally applicable to various other diseases, but I have considered it necessary to repeat them here, and to put them in a still more impressive shape, in order to produce as strong a conviction as possible on the subject under consideration.

Having given this explanation, I have now to revert to the early part of the inflammatory stage, in which the alimentary matter, blood, air, and vitiated secretions, have been described as being hurried on towards the ileo-cæcal valve. When all these matters enter the valve, which appears to freely admit them, they become applied to the lining membrane of the cæcum, and soon after to that of the whole of the colon; and, from having free ingress, but neither egress nor regress, become pent up and accumulated within these intestines, and subject their lining membrane, which, be it recollected, is already in an inflamed state, to a high degree of both mechanical and chemical irritation, and in fact, to an

irritation which increases in intensity with every accession of matter from the superior division of the canal. In this way, the irritation and distension quickly become such as to rouse the abdominal muscles to frequent and violent expulsive efforts; but these efforts almost invariably fail, at an early period of the disease, in forcing open the upper annulus or entrance of the rectum, because this part of the intestine, by being directly exposed to the operation of the same cause by which the abdominal muscles are excited, is stimulated to oppose a degree of resistance proportioned to that of the force exerted by these muscles. Here, however, it may be objected that the fact of bloody and mucous discharges being co-existent with the inflammatory stage, is evidence of the expulsive efforts making, at least, a partial impression upon the superior annulus or entrance of the rectum; but as the lining membrane of this intestine is, at the time, in an equally inflamed state, and, consequently, as the blood and mucus discharged may be furnished from this, and not from a higher source, the objection almost ceases to be one. Indeed, it would be much better sustained, if it it could be shown that flatus was discharged at this early period of the disease; but as far as my experience of the disease goes, and it has been ample, the discharge of flatus per anum is an occurrence which is not observed for many hours or even for some days after the appearance of mucous and bloody stools. But to proceed. The inflamed lining membrane of the cæcum and colon, in consequence of being so singularly circumstanced, necessarily advances to ulceration; and it is obvious that this membrane will become much more deeply and extensively ulcerated in those situations in which the contents have been shown to become lodged, or to meet with the greatest obstruction in passing. Accordingly, pathological anatomy shews that the cæcum, and the transverse arch and sigmoid flexure of the colon are the situations in which the most numerous and the deepest ulcers are found. But if matters were to continue thus for any length of time, it is manifest that the ulcerative process would quickly destroy the muscular coat, extend to the sub-serous and serous tissues, and cause death by enteritis. In point of fact, such a conversion is far from being an uncommon termination of dysentery. Nature, however, generally makes an effort in which she succeeds in arresting the activity of this process, and causing the disease to assume a more chronic form; and the means by which she proceeds to effect these objects appear to be of a twofold description. In the first place, it will be shown hereafter that, as the disease advances, a recuperative power is bestowed upon the small intestines; that these intestines, together with the liver, no longer pour out secretions of the same vitiated and irritating quality, or in the same quantity; and that thus one great source of irritation and distension is removed. In the next place, the inflammatory action going on in the sigmoid flexure of the colon, soon extends itself, first, to the mucous, subsequently to the muscular structure of the upper annulus or orifice of the rectum; and, by thus weakening the resistance previously made by this part to the expulsive efforts, enables a quantity of flatus, blood, mucus, and occasionally fluid feces, to escape from time to time, per anum. Here is a still more effectual arrangement than the former for relieving the oppressed condition, and checking the rapidity of ulceration, of the cæcum and colon. From the upper annulus of the rectum the disorganizing process soon extends along the inferior portion of this bowel; solid and fluid feces, but exceedingly rarely what are called scybala, are found more frequently, in greater quantity, and with an admixture of purulent matter in the discharges by stool; and the disease may now be said to have assumed the chronic form." 161.

This explanation being taken for the true one, and the state of the cæcum and colon being such as our author has described it, he thinks the inference is direct, and of great practical importance—"namely, that the chief curative indication should be to pass up the gum-elastic tube, and introduce it

into the sigmoid flexure, in order to give exit to the accumulated and pent up contents of the cæcum and colon." Dr. O'B. is aware of the objection that lies against this measure, on account of the highly irritable, if not inflamed state of the rectum; but assures us that the pain is momentary, and the benefit great. In consequence of the prevalence of cholera, and the disappearance of dysentery, our author had been able to use the remedy in one case only of the disease, when the body of the work was printed. This case we shall give, in order that the author may have no cause of complaint against us.

"On the evening of the 11th of April last, Miss Rosetta F., an infant nine months old, was given, while teething severely, two grains of calomel, which produced, during the night, severe vomiting, purging, and, as would appear from her cries, considerable griping and pain. The following day, and while she still had more or less of purging, the nurse imprudently carried her about in the open air, and without sufficient covering. On that night she began to pass blood and mucus per anum, unmixed with a particle of fecal matter; she moaned continually, and threw up the breast-milk, nearly as soon as she took it. To remove these symptoms, she was placed in a warm bath, had the abdomen stuped with warm water and spirits, and was given internally mint tea and castor oil, which she likewise rejected by vomiting. Various domestic injections were also administered to her by a bag and pipe, but were invariably returned unchanged, and without producing any feculent discharge; and it was observed that she passed no urine for twenty-four hours. In this state, but the general symptoms becoming daily more aggravated, she continued until Sunday the 15th, when the family feared she was dying, and I was requested to see her. Her countenance was then exceedingly pale, her feet and hands, although enveloped in warm flannel, were very cold, and she lay, evidently from great weakness, quite motionless in the nurse's lap, with her eyelids half closed, and seemingly regardless of the persons and objects about her. Her pulse was very quick and feeble, she was passing, every ten minutes, quantities of blood and mucus, untinged with fecal matter, from her bowels, and her abdomen was hard and distended. My first care was to divide the gums by a deep crucial incision made at all those points where teeth were making their way; but perceiving that she was in no degree relieved by the operation, and seeing the imminent danger in which the infant was placed, I resolved on introducing the tube. Accordingly, no time was lost in doing so, and, although it was but a size smaller than the stomach tube, no unusual difficulty was encountered in passing it, and the infant did not cry much, or seem to feel any great pain. As soon as the instrument entered the sigmoid flexure, a burst of flatus, followed by fluid feces, blood and mucus, escaped through it, and on these ceasing to come away, an injection, composed of half a pint of warm water and half an ounce of castor oil, was thrown up. The tube was then withdrawn, and immediately followed by a very considerable quantity of solid and fluid feces, mixed with blood and mucus. In less than an hour, the infant became generally warm, very lively, took the breast with avidity, and without vomiting up the milk as before; and her pulse, although still quick, became much fuller and stronger. She was now directed to have a tea-spoonful of electuary of sulphur every fourth hour, to get a little weak chicken broth from time to time, and to have the belly frequently stuped with an infusion of half an ounce of leaf tobacco in two or three quarts of boiling water, which was to be used as soon as it had sufficiently cooled down. During that day, she had two or three stools, from which blood and mucus gradually disappeared, and she slept naturally during the night. The following morning, she was so well as to require no further treatment, and she is now a healthy, strong child." 169.

Dr. O'B. does not mean to exclude other and appropriate remedies in dysentery. He thinks, however, that it will supersede the use of many other medicinal measures, and more especially blood-letting. He informs us that, about nine years ago, he published a paper "on the use and advantages of tobacco in the treatment of dysentery," and he avers that subsequent experience confirmed him in its utility. By it the necessity for bleeding was obviated—and he did not lose a single case of acute dysentery, when this remedy was employed.

"I have found it a most useful adjuvant in the treatment of colic, enteritis, and other affections of the bowels; and I have often employed it with success, in cases where, from the degree of debility which existed, general bleeding, although indicated, would have proved more fatal than the disease itself. In short, time has but served to establish the practice, and confirm all the statements made in my paper on this subject." 170.

The mode of application is a quarter of a pound of tobacco infused in four or five quarts of boiling water, and used as a fomentation, till prostration of strength ensue. Mean time a dose of castor oil is to be administered and repeated till the bowels are cleared. Here our author puts forth a pretty severe tirade against a reviewer in this Journal, who ventured to moderate Dr. O'Beirne's sanguine anticipations from having had a single case of tetanus terminate favourably after the use of tobacco. One of the passages so violently assailed is this:—"*A single case* can do no more than authorize further trials, without exciting any thing like sanguine hopes, or forming any basis for general conclusions."—*Med. Chir. Review*, 1823. It would probably be a good maxim for our author himself to observe, even on the present occasion. But, contrary to the usual disposition of critics, we are disarmed by censure, not by flattery—therefore we shall pass by Dr. O'Beirne's criticisms on the reviewer in this Journal.

The subject of tympanitis next engages our author's attention, and the tube is recommended as the remedy. Tetanus is to be the subject of a forthcoming volume, and therefore is passed over in this, with the single observation that, as obstinate constipation is a never-failing attendant on tetanus, "the introduction of the tube never fails on overcoming it."

DELIRIUM TREMENS.

The application of the mechanical remedy now under consideration is made with a view very different from that of removing constipation. This view will be developed by the following extract.

"In almost every case of delirium tremens that I have seen, careful inquiry into its previous history has made me acquainted with a circumstance which must be familiar to every experienced practitioner,—namely, that for some time before the attack of the disease, the patient has scarcely eaten any breakfast, and very little at dinner; and has been gradually emaciating, and becoming weak and languid. This being the case, it is but reasonable to infer that the sensorial exaltation which ensues, arises as much from deficient supply of food, and, consequently, of blood to the system, as from the excitement caused by the abuse of spirituous liquors; and that one of the curative indications, and a very important one, should consist in stimulating the system naturally, as by proper nourishment, as well as by such artificial means as opium, camphor, wine, or

spirituous liquors of any kind. In point of fact, remedies of the latter description must be but temporary in their effects, and act under every disadvantage, so long as the vascular system continues to be weakened by a defective supply of blood, and no longer in equilibrio with the nervous system, or capable of supplying this system with the necessary quantity or perhaps quality of blood. Accordingly, although they succeed in persons who have not had many attacks of the disease, and possess sufficient recuperative powers, we know that they too often fail in cases of an opposite description. It may be objected, however, that the patient's stomach is too irritable to bear food, or that he has an unconquerable disgust to it, and, in short, that he either cannot or will not take any nourishment, or will only take it in such small quantities as would be quite insufficient for the purpose. This objection is supported by experience and reason. But what objection can be urged against the plan of nourishing the patient per anum?" 194.

Two cases are related, in which the introduction of strong animal broths appears to have been very beneficial. We need hardly remark, however, that the common syringe would have answered the purpose just as well as the elastic tube—at least, we never find any difficulty in the introduction of broths or other enemata where they are judged necessary.

We have now given an extended and faithful analysis of Dr. O'Beirne's work—with the exception of the controversy respecting Sir Charles Bell's views of the facial nerves, and we have very few comments to make. We think it will be manifest to every one, that the new remedy for "constipation" is quite inapplicable to the general run of that complaint, under its common acceptation. Constipation of the bowels does not surely require the difficult operation of passing a tube into the sigmoid flexure of the colon every time that the bowels require evacuation—nor would this prove a remedy for constipation after all. We think it unquestionable that the tube is only a remedy for dangerous and obstinate *effects* of constipation, or other mechanical obstruction to the intestinal evacuations. In such cases, and such cases *only*, can it be applicable—and then *only* in the hands of an expert surgeon. We confidently refer to the cases introduced, and Dr. O'Beirne's own description of the operation, for proof of the justness of these observations. Dr. O'B. ought not to be mortified if his favourite remedy be thus limited in the range of its application; for it will still be a very valuable addition to the list of our remedial agents, in difficult emergencies. We have little doubt that the author will be greatly offended with us for this "discouragement," as he will call it; but should the author and ourselves live for ten years longer, we hereby invite him to publicly impugn our prognostications, should they turn out false. In respect to his "new views of defecation," we fairly give him considerable merit for originality. We are not, indeed, entire converts to all his views; but we are free to confess that his work will tend to remove some erroneous views entertained by the great body of the profession respecting the function of the rectum and the sigmoid flexure of the colon. However, we have so fully delineated the contents of the book, that no misconception can result, even where the original, (which we strongly recommend) does not come under the cognizance of the reader.

II.

ESSAY ON THE NATURAL HISTORY, ORIGIN, COMPOSITION, AND MEDICINAL EFFECTS OF MINERAL AND THERMAL SPRINGS. By *Meredith Gairdner*, M. D. 12mo, pp. 420. Edinburgh.

THE work is divided into four great sections, illustrative of the composition, the geographical and geognostical situation, the origin, and, lastly, the medical uses of mineral waters. The chemical history is given at great length and with much ability; reference being made to all the best books on the subject. In the early ages of analysis, it was believed that the native fountains of the earth contained almost every mineral substance; and especially the noble metals, as gold, mercury, copper, and arsenic;—hence the ready inference of their wonder-working cures. Hoffman was the first to reject, at at least in part, this merely whimsical idea, substituting one of his own nearly as gratuitous. "Scaturigines delectu quasi instituta ea tantum quæ partibus corporis nostri tam solidis quam fluidis accommoda et amicissima sunt, e terræ visceribus elambunt et in societatem suam admittant."

The labours of Black, Lavoisier, and Berthollet, having introduced into the schools of medicine a more rigid and searching chemistry, many of the supposed active ingredients of native waters were found wanting, and the predominating salts, those on which the effective virtues of the spring depended, discovered to be those which are most ordinarily used in diet or in medicine, such as the carbonate, muriate, and sulphate of soda, muriate of magnesia, and so forth. But it is in chemistry, as in most other pursuits of the human mind; credulity is often followed by scepticism and infidelity. We mean not to disparage the labours of those eminent men who were chiefly instrumental in bringing in the science of chemical analysis—they were quite right, in refusing to admit the existence of any substance in mineral waters, if this existence was not proved by the test of demonstration;—for this is the key to the philosophy of Bacon: but it is interesting to observe the revolution of events; for now it is ascertained that not a few of the conjectural ingredients of Paracelsus and his followers are truly and really present;—we owe this discovery to the recent labours of Berzelius, Bischof, Daubeny, Brandes, &c. In 1822 the first of these eminent analysts detected in the hot springs of Karlsbad no fewer than six new salts, in addition to those previously known.

As we might naturally expect, the most generally diffused and most predominating ingredients are the alkaline and earthy salts; and of these, such as have for their bases soda, lime, magnesia, and alumina, all substances which enter largely into the composition of the solid crust of the globe, are much more prevalent than those of potassa, ammonia, baryta, &c. Lithion has been hitherto found only in very few springs, as those of Ems, Pyrmont, Karlsbad, and Kreuznach. The acids which are the most generally and largely diffused are the carbonic, muriatic, and sulphuric; they are, as a matter of course, in union with the alkaline and earthy bases; and thus are generated the various neutral salts: those hitherto discovered in mineral

waters are—the sulphates of soda, magnesia, lime, alumina, potash, baryta, and of lithion;—the muriates of soda, magnesia, lime, potash, alumina, ammonia, and of lithion;—the carbonates of soda, lime, magnesia, alumina, potash, and of lithion;—the phosphates of soda, potash, alumina and lime;—the fluate of lime—the borate of soda—and the nitrates of potash and of lime. The three last classes of neutral salts are very rare, and have been hitherto detected only in minute quantities. The discovery of the salts of lithion has been made by Berzelius in the waters of Karlsbad, Franzenbrunn, Marienbad; by John, at Gleissen in Brandenburg; and in a few of the Pyrmont springs by Brandes and Krüger. It is probable that they exert little influence on the medicinal properties of the waters; yet the fact of their presence is most interesting, from their rarity, even in the mineral crust of the globe; whether they are more largely distributed in the treasures of the bowels of the earth, is a problem for future inquirers. The number of metallic salts which have been found in springs is small, and their quantity is generally very limited. Iron is by far the most abundantly diffused, and, indeed, scarcely any mineral water is destitute of it. Manganese has been found in the Karlsbad Sprudel, and the waters of Saidschutz and Kreuznach—zinc in the mineral water of Ronneby, in Sweden, and copper, although it has not hitherto been detected in any true spring, exists freely in the pools of copper-mines, of Glamorganshire, in Wales, Fahlun, in Sweden, and Neusohl in Hungary. Silica, from its very sparing solubility, seldom exists in any quantity, except when mechanically suspended; in a state of minute division, it is found in a great number of cold springs, mineral as well as common, and it is a curious and interesting fact, that it is much more prevalent and more abundant in the springs of low, calcareous, and sandstone districts, than in those waters which flow over rocky and siliceous channels, in mountainous regions. Chemically dissolved, it is found only in thermal springs, or in cold ones, which contain a large quantity of soda, or of carbonic acid in excess. By far the most striking examples are the boiling springs of Geyser and Rycum, in Iceland, where it amounts to one-half of all the solid constituents, the former containing 5.40, the latter 3.73. Iodine was discovered by Balard in the waters of the Mediterranean, and by Pfaff in those of the Baltic. In 1820, M. Angelina detected it in the saline waters of Sales, in Piedmont, which contain one-twelfth of muriate of soda, and where it was till then unknown, although these waters had been repeatedly before carefully analysed. It always exists naturally in the form of a hydriodate, generally of soda, more rarely of potass. It has since been found in a great many springs, as in those of Genesio and Castel Nuovo—of Bonnington, near Edinburgh—of Leamington, Cheltenham—of Saltzhausen, near Frankfort, of Kreuznach, Heilbrunn, and Halle.

"In South America, Boussingault has found traces of the hydriodate of magnesia in the saline waters of Antioquia in Peru; and Dr. Mill mentions the occurrence of hydriodate of potass in a spring 16 leagues from Popayan, at an altitude of 10,000 feet above the level of the sea, and between 80 and 90 miles distant from it in a straight line.

I may just recal to the recollection of the reader, that not a trace of iodine has yet been found in rock-salt." 28.

The quantity of this very active substance is always exceedingly minute;

Dr. Daubeny never detected more than one grain in ten gallons of any mineral water; this was in Robbin's Well, at Leamington, and in the old well at Cheltenham, he estimated that there was only one grain in 60 gallons. The quantity is not at all proportionate to that of the muriate of soda in a spring; and at Llandridod, in Wales, it was found in water which contained none of this salt.

Very generally associated with iodine, is the congenerate substance bromine. Balard first discovered it in sea water, and subsequently it has been detected in several saline springs; it exists almost always as a hydro-bromate of magnesia.

"The largest quantity in the brine springs of England, was in those of Middlewich in Cheshire; Nantwich; Ashby de la Zouch, and Shirleywich. In the first, Dr. Daubeny found it to exist in the proportion of 1.337; in the second, of 0.903; in the third, 0.669; and in the last, 0.617. None was found in those springs at Cheltenham which contained iodine, whilst in the Pittville spring, the only one which does not contain it, every 6 gallons contain about a grain of bromine. A distinct trace was found in the water of Llandridod, which, as above mentioned, contains none of the muriate of soda." 28.

Besides the solid ingredients of mineral waters, there are several gazeous substances, which not unfrequently exist in very considerable quantities, and impart to them decided and characteristic properties; by far the most abundant of these is carbonic acid gas, which, when present in excess over the other ingredients, communicates a sparkling effervescence and an exhilarating sharpness to the waters; such are termed acidulous. The most celebrated are the Karlsbad, Pyrmont, Seltzer, Spa, Cheltenham, Tunbridge, &c. Carbonic acid escapes also in large quantities from the earth, in the form of gaseous springs, or solfataræ.

"Indeed Berthier has hazarded an opinion, which is perhaps the most correct view of the subject, that the gas which escapes with such profusion from many acidulated thermal wells, on their coming in contact with the external air, has never been in a state of combination with the water, but is an independent stream of carbonic acid discharged by the same fissure as the mineral water, and is far too copious to be absorbed by the latter. For, not to mention the immense evolutions of carbonic acid which are consequent upon every eruption of Vesuvius, and many other volcanoes, its quiet and peaceful exhalation is a phenomenon of very frequent occurrence in many different parts of the globe." 33.

The Poltersbrunn, at Franzensbad, in Bohemia, discharges great quantities of this gas; likewise the marsh behind the baths at Marienbad, the sulphur-hole near Ems, the Ragozi Well in Wurzburg, and several places in the basin of the Rhine. At Karlsbad, it issues in such quantities through the fissures of the great tufaceous vault on which the town is built, that the cellars of the houses in the lower part of the town are completely deserted. Every one has heard of the Grotto del Cane, near Naples; and of a similar nature are the Dunsthohle, near Pyrmont, the Puit de la Poule, near Neyrac, in the Vivarais, and probably the Gueno Upas, or poisoned valley in Java, and Alexander's Cave, near Tabriz, in Persia.

Another copious acid exhalation is that of sulphurous acid. It is a constant product of the lavas of Vesuvius and Ætna—of Stromboli and Bourbon; and Raffles describes a plain at Cheribon, in the N. E. of Java, 100 yards in diameter, which emits sulphurous vapours at every point. The

sulphuric acid also, is frequently found; for example, in many of the grottoes in Italy—in a pool at Ætna—in the island of Milo—in the remarkable river which issues, highly impregnated with it, from the crater of Mount Ida, in Java, and in the Rio Vinagre, and adjoining hot springs in the Andes of Popayan, according to the statements of the celebrated Humboldt.

Muriatic acid vapours are emitted from volcanic localities, as from Vesuvius, Peak of Teneriffe, and Jorullo, in Mexico. The gaseous, non-acid ingredients of mineral waters are sulphuretted hydrogen, carburetted hydrogen, azote, hydrogen, and, lastly, oxygen and atmospheric air. When the first of these gases exist in predominating quantity, the springs are denominated—the sulphureous. In some cold springs, it is not an original ingredient, but the product of a partial decomposition of certain sulphates, arising from the contact of organic matters, such as particles of straw, chips of wood, &c. Besides the pure sulphuretted hydrogen, sulphur is met with in mineral waters as a hydro-sulphate, or, as it may be more appropriately termed, a hydro-thionate of lime or of soda. It is only by keeping this in view, that we can explain why some waters retain their sulphureous properties after boiling.

We have now glanced at almost all the ingredients, derived from the mineral kingdom, in cold as well as in thermal springs, and it only remains to allude to such as are of a vegetable or animal nature. The quantity of these is always very small, scarcely ever amounting to one part in 10,000 of water.

"In some cases, their presence is of easy explanation, being derived from beds of coal, petroleum, fossil vegetable or animal remains, or other bituminous substances situate in the route of a mineral water through its subterranean channels towards the surface. But that highly azotized principle, so frequent in many hot springs, is utterly inexplicable by this cause, as they are found to emerge from granite and crystalline schistous rocks, as in the Pyrenees, or from the ancient trachytes, products of former volcanic operations, as in central France, matrices utterly destitute of all vestiges of organic life." 42.

These vegeto-animal substances may be divided into three kinds:—1. Humus-extractive, which has been found by Berzelius in the Karlsbad, Königswart, and Kreuzbrunnen springs; and by Braconnot, in the thermal waters of Luxueil; this latter chemist called it Ulmin.

2. Resinous-extractive; it is closely allied in properties to mineral resin, and is most common in cold sulphureous and chalybeate springs; John detected it in the waters of Gleissen and Hermbstädt; and Paganini in those of several springs in Italy.

3. Animal-extractive, or Baregine; so denominated from its being found in considerable quantities in the hot sulphureous springs of Bareges in the Pyrenees. It is termed "Zoogen" by Gimbernat; "Theiothermin" by Monheim; and "Glairine" by Anglada. It is of a greyish-white colour, is unctuous and resinous; inodorous and without any sensible taste; is soluble in hot water, and when recovered by evaporation has a corneous aspect, and is semi-transparent; when burnt, it emits a strongly animal odour; by destructive distillation it yields carbonate of ammonia, azote, carburetted hydrogen and carbonic acid; it forms a soap with the caustic alcalis. One of its most characteristic qualities is, a very long exemption from putridity when exposed to all the necessary conditions of air, heat and moisture. On

the whole we may regard it as allied more to mucus, than either to gelatine, or tannin. It is almost peculiar to thermal waters and very generally occurs in those of a very elevated temperature, as at Aix-la-Chapelle, Baden, Bareges, Wiesbaden, Teplitz, &c. Gimbernat found it in the hot vapours which rise from many springs from Vesuvius, and the Solfatara of Pozzuoli. Vauquelin and Thenard mention the occurrence of a 'matiere grasse' in the water of Provins near Paris. Much contrariety of opinion has existed, as to the probable origin of Baregine; that it cannot be derived from the percolation, and as it were, the lixiviation of fossil bones by the mineral waters, appears from the circumstance, that almost all the springs in which it is found, are known to issue from granite, mica-schist, trachyte, &c. which contain no traces of animal remains, nor even of the very elements of organic compounds.

"In a valuable memoir, Monheim has quoted a singular experiment of Dobereiner's, which, if not explaining, is extremely pertinent to the present question. Upon passing watery vapour over red hot coals, contained in an iron tube, in greater quantity than what could be decomposed, he obtained, besides carbonic acid, carbonic oxide, and carburetted hydrogen, a *gelatinous* substance, in such quantity as to close up the tube several times in succession: this substance was very soluble in water, and possessed many of the physical and chemical properties of tallow." 46.

Such is an outline of the most interesting ingredients of mineral waters; ample details on the exact and relative quantities, or the combinations, probable origin, and so forth, are contained in the elaborate work before us: to this we must refer the curious reader, who cannot fail to be alike instructed and amused by the many important facts brought under his notice. The short chapter on the "Constancy of the Impregnation of Mineral Waters" is particularly deserving of attention. How wonderful are the works of creation!—that the same fountain should pour out its gushing stream for centuries and thousands of centuries, ceaselessly, and for aught we know, without change or diminution, must astonish every one, and furnishes a boundless theme of speculation to the philosopher, as to the operations which are going on in the bowels of the earth, to feed its inward lakes with such enormous quantities of saline matter, and that too, uniformly, and in the same proportions and combinations; but this is a question which appertains rather to geology than to medicine, and we shall be satisfied with simply alluding to it. The next topic which engages our notice is that of the classification of mineral waters. On the first consideration, we are tempted to believe that this may be easily and satisfactorily done; but, in fact, it is not so, for although we are in the habit of speaking of acidulous, sulphureous, chalybeate, and saline springs, we must remember that the line of demarcation between each of these groupes is not nearly so distinct and obvious in Nature as in our books of chemistry, or rather that the line becomes frequently so faint as scarcely to be traced; and hence, at different periods, the same springs have been arranged as acidulous, as purging, and as chalybeate; the waters of Karlsbad are an example of this fluctuating uncertainty, and well illustrate that each of the views is in some measure correct, varying only according to the different bias of the enquirer, and the object of his pursuit.—The geologist looks at the vast tufaceous vault which encloses the boiling Sprudel, and which has been formed by the continued de-

position of calcareous matter, and he is led to theorize on the important changes which have been, and may be effected by such springs on the physiognomy of the globe; the physician has a more limited scope, and he is satisfied with knowing that the waters are admirably tonic, in consequence, no doubt, of the iron which they contain; whereas the chemist tells us that they ought rather to be regarded as purging or saline, because the quantity of Glauber salt largely predominates over every other ingredient.

The same remarks are applicable to the waters of Bath, Wiesbaden, Teplitz, &c.; each of which has had various appellations, according to the varying medical and chemical philosophy of the age. Indeed it is not possible that the physician and the chemist can ever agree; and for this reason, that the therapeutic qualities of many springs are not in accordance with the predominating ingredient;—on this, as on many other occasions, Nature is repugnant to the wisdom of science. Dr. Black divided all mineral waters into six classes;—the thermal, acidulous, fossil alcaline, purging, chalybeate, and sulphureous. Saunders, in his excellent treatise, attempted to combine a chemical and a medical arrangement, as follows:—

"1. Simple cold, *e. g.* Malvern; 2. Simple thermal, *e. g.* Buxton; 3. Simple saline, *e. g.* Seidlitz, the Sea; 4. Highly carbonated alcaline, *e. g.* Seltzer; 5. Simple carbonated chalybeate, *e. g.* Tunbridge; 6. Hot carbonated chalybeate, *e. g.* Bath; 7. Highly carbonated chalybeate, *e. g.* Pyrmont; 8. Saline carbonated chalybeate, *e. g.* Cheltenham; 9. Hot saline highly carbonated chalybeate, *e. g.* Karlsbad; 10. Vitriolated chalybeate, *e. g.* Hartfell; 11. Cold sulphureous, *e. g.* Harrowgate; 12. Hot alkaline sulphureous, *e. g.* Bareges. This very complicated classification was succeeded by one of a totally opposite character, remarkable for its simplicity and extreme generality; it is that recognised by Murray, Alibert, and the majority of late writers on the subject. They are all comprised under the four classes of,—1. Carbonated; 2. Sulphureous; 3. Chalybeate; 4. Saline." 85.

The class of the saline waters in this last arrangement may be advantageously subdivided into three sections, according as the sulphates of soda or of magnesia, the muriate of soda, and the carbonate of soda, are predominant and characteristic;—we shall thus have the purging, the saline, or brine, and the alcaline waters. The mineral springs in Great Britain belong chiefly to the sulphureous, saline, and chalybeate classes; there are few alcaline or acidulous; and the number of hot or thermal waters is small, considering the great variety of geognostical distribution. In Scotland none of this latter class have hitherto been found; in England they form two distinct geographical groups; a northern in the county of Derby, including Buxton and Matlock—the temperature of these is very considerable; and a southern on the banks of the Avon, on the borders of Gloucester and Somerset. In this group we have the ancient waters of Bath, the hottest of the springs of England, and whose celebrity extends back to the age of the Romans; and the Bristol hot-well, the temperature of which is much inferior to that of Bath. It is worthy of notice, that the soil, out of which the Bath springs issue, emits copious bubbles of a gas, which was ascertained by Priestley to consist of 95 parts of azote, and 5 of carbonic acid. The only thermal water in Wales is that in the valley of Taafe, about six miles north of Cardiff in Glamorganshire; and Ireland possesses but one also, at Mallow, in Cork; its temperature is very inconsiderable. The chief

sulphureous waters in Scotland are those of Strathpeffer in Ross, and of Moffatt in Dumfries; in England, those of Gilsland in Cumberland, Harrowgate in Yorkshire, Holbeck near Leeds, Leamington in Warwick, and in Wales, Llandridod in Radnorshire; and in Ireland, those of Lucan in the County of Dublin; several in Leitrim, and Swadlinbar in Cavan. The chief chalybeate waters of Great Britain are those of Hartfell near Moffat; Vicors Bridge, near Dollar in Fife; Peterhead; Bonnington near Edinburgh; Tunbridge, on the southern borders of Kent; Horley-Green, near Halifax, in Yorkshire; and one on the south coast of the Isle of Wight: and of Ireland are those of John's Well, in Kilkenny, Wexford Spa, Galway Spa, and Athlone. The saline springs are at Dunblane, near Stirling, [made classical by the labours of the late Dr. Murray,] Airthrey, Pitcaithly near Perth, Innerleithen on the Tweed, at Leamington, Cheltenham, Epsom, and Llandridod. The brine springs of England form two principal series; a smaller and more northerly in Durham; and a southern one, which is much more extensive, being distributed over the counties of Cheshire, at Middlewich, and Nantwich; Staffordshire at Shirleywich; and Worcestershire at Droitwich. In all of these the impregnation amounts almost to saturation; it is much less considerable in the springs of Kingswood near Bristol, of Bualt in Radnor, and of Ashby de la Zouch in Leicester. In Ireland the best known saline waters are at several places near Dublin—Cape Clear, Clonmell, Carrickmore, Antrim Spa, and Dromore. In reference to the division of alcaline springs, the only one in Britain, is that of Malvern; but the quantity of carbonate of soda is very small, and is associated with sulphate of soda and carbonate of lime. The principal purging waters are those of Scarborough and of Cheltenham. In the sandy vale at the latter place there is a great variety of springs, in some of which the sulphate of soda predominates, and in others the muriate; these two salts are however generally in nearly equal quantities, and are associated with the sulphate of magnesia, a little oxide of iron, and a slight sulphureous or carbonic acid impregnation.

It is not our intention to expatiate on the medical properties of the different classes of springs; a remark or two will suffice. Those who contend that the salutary effects of any spring may be inferred from its chemical composition are much at fault; for Murray has most ably shewn, that in our analyses, we often obtain a mere *product* and not the *educt* of the waters.

"The effects of a spring (says our author most justly) are often decidedly the reverse of what we should expect from its known chemical composition. Sometimes even, as has been more than once hinted in the foregoing part of this essay, common drinking springs contain more mineral matters than medicinal waters of great reputation; nay, in many of very great celebrity, chemistry has been able to detect so few active ingredients, that several have attributed their virtues solely to the great purity of their water. If this be the case with cold springs, it will certainly hold with increased force in regard to those possessing an elevated temperature. Warmth not only enables them to hold in solution a much larger quantity of active ingredients, but will give to very minute quantities a vastly increased activity; and finally renders soluble those deemed least so, as silica itself." 356.

The singularly beautiful speculations of Dr. Murray have certainly tended

to throw considerable light on the medical history of mineral waters. In order to illustrate his views, let us take the Dunblane water; it contains sulphate of lime and muriate of soda; the former a wholly inert, and the latter in small quantities, not a very active substance; but if the constituents of these salts are interchanged, a muriate of lime and a sulphate of soda will be formed; and the quantity of the former ingredient will readily account for the efficacy of the spring in scrofulous complaints, and its cathartic powers will be referable to the Glauber salt;—indeed on no other supposition are these explicable; for the water contains no other ingredient to which we can ascribe these qualities.

Another consideration which ought to be borne in mind, and which should stimulate us to still more exact and rigidly-searching methods of analysis, is, that perhaps undiscovered principles or elementary substances exist in many of the most efficient springs;—and we are also to remember, that in many, perhaps in all, there are certain volatile ingredients which elude detection, even by the most delicate analysis. We know what a powerful influence in modifying the solid contents of a water is exerted by minute quantities of carbonic acid and of sulphuretted hydrogen; and we may fairly presume that similar or more powerful effects may be produced by other gases, which we have failed hitherto in discovering. No one suspected the presence of such an active ingredient as iodine in the saline waters of Sales in Piedmont, which had for ages before been celebrated for the cure of scrofula and bronchocele, till Angelina discovered it in 1820; and it is only within the last few years that the brine springs of Ashby de la Zouch in England, and of Kreuznach in the Palatinate, have been shewn by Danbery and Liebig to contain an unusually large proportion of the very potent principle—the hydrobromate of magnesia.

Little wonder, then, that the artificial mineral waters have so much fallen short of, in medical virtues, their natural prototypes. Formerly in the days of Nooth and Schweppe nothing was thought necessary in their preparation, except the appropriate employment of a simple compressing apparatus; but Struve of Dresden has by his unwearied and scientific labours brought the manufacture to infinitely greater precision and accuracy; he has succeeded in imitating perfectly some of the waters, as those of Karlsbad, but has failed in other attempts; thus his Ems water is much stronger and more violent than that of the natural springs. He is also obliged to admit that he has never yet been able to imitate satisfactorily those waters whose salutary efficacy does not correspond with the apparent insignificance of their mineral impregnation.

There was formerly a manufactory of artificial waters in London by Schweppe; at Geneva by Paul; at Ratisbon by Fries; and by Ziegler at Winterthur; but in the present day, the principal establishments are the *Brighton German Spa*, where the Karlsbad, Ems, Marienbad, Pyrmont, Spa, Seltzer, Saidschutz, &c. waters are prepared;—the *Tivoli* at Paris, in the Chaussée D'Antin; it is a large and excellent establishment, where the chief waters of France, Germany, and Italy may be had;—the *Oleggio* in Piedmont, instituted by Paganini ten years ago. It is delightfully situated on the summit of a hill, near the road over the Simplon, about four miles from the Lago Maggiore, and is much resorted to; a botanical garden, coffee-rooms, library and theatre, add much to its attractions;—the manu-

factory of the Karlsbad, at Stockholm, under the direction of Berzelius; and lastly, the establishments which have been set on foot by Struve himself at Dresden, Leipzig, Berlin, Konigsberg, Warsaw, and Moscow. Our readers are probably aware that almost all mineral waters undergo changes, when kept, or transported from their native springs; this is especially the case with the acidulous and chalybeate waters; the fixed air escapes, and the iron of the second class is precipitated in the state of oxide; different methods have been suggested to obviate the precipitation; we shall mention two.

"The first was proposed by Professor Steinmann of Prague (Hesperus for August 1821). It is founded upon the idea that the hydrated oxide of iron, which falls to the bottom of the most accurately corked bottles, might be separated by the tannin and gallic acid contained in the cork, as this is often coloured black at its point of contact with the water. He therefore advised the corks to be previously boiled, in order to extract these two principles, and found that, in bottles closed with boiled corks, the oxide of iron was not separated, after having stood for a considerable time, but amounted, by analysis of the water, to the original quantity of water contained in the spring.

The other method, originally suggested by Klaproth, and lately revived by Link (Hufeland's Journal, lxiv. st. 5, p. 3), consists in merely driving an iron nail through the cork. It has been even alleged that this increases the amount of iron held in solution by the water." 368.

Our time and space permit us to allude to only one subject more, and we have chosen that of "*Mineralised Mud Baths.*" Men are noted for torturing their brains to discover new pleasures, and strange and novel remedies; not satisfied with the wholesome and mundifying application of steam and water to their bodies, they have thought fit, on some occasions, to dip themselves in mud and mire, and have vehemently lauded the practice, as of singular efficacy. We had often heard of the native Hindoos piously killing their aged parents by seating them on the banks of the Ganges, at low water, till the mud and current gradually choked them; and if this did not happen quickly enough, by forcibly cramming their mouths, and closing up their eyes with the sacred mire; and we read that at Sacker in the Crimea, the practice of mud-bathing is in high repute among the sages of Tartary. As the account of it is interesting, we shall transcribe it. Sacker is a salt-lake, the evaporation of which in the hot Summer months, affords the deposit which is used:—

"Patients flock thither from all parts of the Crimea, and the cure lasts from eight to thirty days, and is conducted by the Tartar priests. The following is the method of using it detailed by Lang. Early in the morning a pit is dug, where the mud is freest from hard bodies and saline crystals. In this the patient is laid about noon, and covered up to the neck with the mineral mud. He is protected from the sun's rays by a parasol or cloth. He remains from two to three hours in this position, during which time the mud is renewed twice or thrice. His thirst is quenched by wine and water, or quass. After the bath, the patient is laid upon a straw-mat, and his whole body washed with the salt water of the adjoining lake. This process is considered by the natives a sovereign remedy for chronic gout and rheumatism, abdominal obstructions, glandular swellings, chronic cutaneous eruptions, and even intermittent fevers." 410.

But more learned men than Tartar priests have recommended the application of various muds to the body; Pliny speaks highly of it; and Galen

notices with praise the use of the mud of the Nile; nor are we to deride it as altogether nugatory. Many remedies may be more pleasant, it is true; but it is quite possible, that the deposits from hot springs in particular, may exert considerable stimulating effects on the skin, especially when a douche of mineral water is afterwards used as a cleansing bath, and frictions are briskly employed; and that therefore this may be of occasional use in old gouts and rheumatisms, some chronic cutaneous diseases, palsies, scrofula, &c. The composition of mineralised mud is very various; most of the ingredients of mineral waters are found in it; the gaseous matters may have escaped, but their place is supplied by others, as carburetted hydrogen arising from a partial fermentation, or from the chemical re-action of the materials; and in addition to these a large proportion of organic matters is often present. When it consists of the simple deposit of any water, Duchanoy termed it "mare," and "bone" when the deposit was mixed with earthy matters; the Italians designate both kinds by the word "lutatura;" but we may conveniently distinguish three varieties:—1. The simple deposit of mineral waters highly charged with solid metallic and saline particles;—2. A mixed deposit of these particles, and of organic, chiefly vegetable matters, derived from the soil, and of gases arising from the fermentation; such are the mud-baths of Marienbad, and Franzenbad; and 3. Where, besides the ingredients hitherto mentioned, there is superadded a quantity of gelatinous azotised matter. This is found exclusively in thermal waters, which emit azotic gas, and which are generally sulphureous.

Osann has recognised six different kinds of mineral mud-baths—the *Sulphureous;* they are obtained from hot and cold sulphureous springs; have a peculiarly unctuous feel and a penetrating brimstone smell; the most noted are those of St. Amand, in Belgium; Eilsen, Gunthersbad, and Baden, in Germany; and of Acqui, in Piedmont; and of Abano, near Padua.

"This last has been celebrated since the times of Martial, Ammianus Marcellinus, Claudian, and Pliny. It is prepared by mixing fine clay and sand, which is placed in a pit or wooden trough, over which the thermal water is allowed to flow for some months. After having been used for the patients it is spread as manure over the fields. The mode of employing it is to spread a linen cloth with a layer of mud three or four inches thick, in which the whole body of the patient, or merely the affected part, is enveloped, and which is renewed as soon as the temperature falls." 406.

2. The *Carbonated*, which consists of the deposit of ferruginous mineral waters, mixed with vegetable earth, peat-bog, moss, &c.—they have a bituminous and slightly sulphureous smell; such are the mud-baths of Marienbad, Gleissen, Muskau, in Germany; and of Pyrmont and Audinac, in France.

3. The *Ferruginous*, resembling the carbonated, but containing more iron; and being thereby more astringent; the best known are at Loka, in Sweden; Medivi, in East Gothland; and at Piestan, in Hungary.

4. *Saline*, which are the product of evaporation of salt springs and lakes. Besides the one at Sacker in the Crimea, there are baths of this description at Elmen in Magdeburg, Ischl in Salzburg, and at Bourbon l'Archambault, and Bourbonne les Bains, in France.

5. The *Earthy*. This consists of brownish, soapy, sinter-like matter deposited by hot and cold springs, rich in carbonated earths, or of the frothy

matter obtained by boiling many springs (the Badeschaum of the Germans.) Such are the baths at Schlangenbad, Wiesbaden, Hofgeismar, and Ussat; and—

6. Lastly the *Gelatinous*. The mud of these baths is a product of thermal water only, as we have stated before, and was known, as a remedial application, to Pliny, "muscus, qui in aqua fuerit, podagris illitur prodest." At Gastein, Baden, Neris and Dax, this ulva thermalis, as it has been called, is used in scrofulous sores, running tetters, &c.

We must now close our remarks on Dr. Gairdner's work, although a large portion of it has necessarily been left unreviewed; the chapters on the geography, topography, and geognosy of mineral springs, and on their probable origin, are of great interest, and well deserve the perusal of all lovers of natural history. As a whole, we regard it as a production of very high merit and eminent utility; the research which it displays is truly astonishing, and the judgment in selecting, arranging, and combining facts, from such varied sources, stamps the author as a most promising votary of science. He is young, but already has done much, and the horoscope of his scientific nativity augurs abundant success. We learn that he has been selected by the Hudson's Bay Company to go towards the Colombia River and the rocky mountains, on the Pacific side of North America, for the purpose of scientific research; his distinguished knowledge of botany and of geology admirably fits him for this enterprise, and leads us to anticipate much interesting information from his labours. We wish him every success, and assure him that it will afford us great pleasure, if we are again called upon to introduce him to the public as author of a work equal in talent to his Essay on Mineral and Thermal Springs.

II. *(bis.)*

A TREATISE ON THE VENEREAL DISEASE AND ITS VARIETIES. By *William Wallace*, M.R.I.A. &c. Surgeon to the Jervis Street Infirmary, Dublin, and to the Infirmary established in that City for the Treatment of Cutaneous Diseases, including Venereal Diseases. Octavo, pp. 382. London, 1833.

THERE can be no question of the want of a good description of the venereal disease, and, unfortunately, there can be as little doubt of the difficulties connected with an attempt to supply that want in a satisfactory manner. The history of the disease is a history of the most contradictory opinions that have ever been entertained, even in medicine. Authority is pitted against authority, and, strange to say, this war of dogmas has not been productive of freedom of thought and of accurate investigation, but has ended in a submission, as slavish as disgraceful, to the despotism of a name. It is time to throw off the yoke of Mr. Hunter, and when we have freed ourselves from the fetters with which his hypothetical and fanciful mind has bound us, we may discover, in rigid observation and induction, an approach to the certainty and truth that have hitherto altogether eluded us.

Those who have had an opportunity of studying extensively, and have employed their opportunities in observing carefully, the venereal disease, must be too well convinced that much general ignorance exists with respect to its nature, and that much mischief is perpetrated in its treatment. We have this day seen a patient, who has been subjected to a course of mercury of five months' duration for a primary sore, with the effect of producing almost total destruction of the soft parts of the nose, and a great amount of injury to the constitution. This most injudicious treatment was not from the hands of a quack, or an otherwise ignorant person, but from one representing very fairly the ordinary attainments of professional men.

A tolerable knowledge of the sores and the forms of eruption that do or do not require or bear mercury, is certainly not to be found in the generality of medical practitioners. They do not appear, and we speak from what we have witnessed, to possess any definite notions respecting either the disease or its treatment—to be aware of the varieties of constitutional and local symptoms, and the local or general states giving rise to or accompanying those varieties—they wield mercury as a madman would a sword, wildly and destructively. This is not idle fanfaronade, but sober and melancholy truth, and the writer who can remedy this deplorable condition of things, who can lead the mass of the profession to more accurate notions of the phenomena of the disease, and a more appropriate and definite application of remedies, will deserve well of mankind.

Our limited space forbids us to indulge in lengthened prefatory observations, and we shall proceed at once to the review of the work before us. We should mention, however, that Mr. Wallace has enjoyed considerable opportunities for investigating the subject, and that he appears to have begun and conducted the investigation in a rational and philosophical manner. Having diligently observed the cases which hospital practice presented to him, he was soon impressed with the fact, that books and nature disagreed. He shall relate in his own words the method he then adopted, as we feel assured that, whether Mr. Wallace has succeeded or not, it is the only mode of arriving at any important and satisfactory conclusions in the study of this malady.

"But I soon found it impossible to reconcile the writings of the best authors on the venereal disease with many of its most common phenomena; and it appeared evident, that if I wished to make any very satisfactory progress in its study, it would be necessary to unshackle my mind from authority, and to take nature only for my guide. In fact, there seemed to be no alternative, but either to investigate the subject *de novo*, or to remain content with a very imperfect knowledge of a disease which daily obtruded itself on my observation, and with which it was therefore of the first practical importance to be intimately acquainted. The former alternative I preferred, and with the object of carrying it into effect, I commenced, so long ago as the year 1819, when an additional field for observation was opened to me by my election as Surgeon to the Jervis Street Infirmary, to note every case of venereal disease which occurred, but with particular accuracy such as presented any interest or peculiarity, and at the same time to collect, with the assistance of qualified artists, accurate delineations, not only of all the varieties of this disease, but of all the phases of each variety.

During the earlier period of this investigation a system of treatment the least likely to interfere with the operations of nature, was as far as possible adopted, with the object of acquiring a knowledge of the natural history of the disease;

—the local applications being in general, lint wet with water, and, when necessary to prevent evaporation, covered with oiled silk, or with a pledget of wax ointment; while all constitutional remedies, except mild laxatives, were avoided, unless when the patient's safety required, from the supervention of alarming symptoms, more active measures; and these were then employed in conformity to the general principles of medicine and surgery, totally abstracting from consideration every idea of the disease possessing specific characters, or requiring a specific course of treatment. After this practice had been pursued for a sufficient time to fulfil the objects in view, various other plans of treatment, suggested by previously acquired knowledge of the advantages and disadvantages of mercury, &c. were tried, and by degrees that recommended in the following pages was adopted, from a full conviction of its being, on the whole, the most secure and satisfactory.

By a steady perseverance for some years in the plan of investigation just mentioned, I accumulated, at great expense, and with much labour, a collection of representations and descriptions of venereal diseases, so numerous and varied, that at last I ceased to meet any form, or even any stage of these affections, in either hospital or private practice, which was not frequently described in my case-book, and often represented among my drawings.

When this period arrived, my next object was to arrange the great mass of materials thus collected, so as to enable me to arrive at such general conclusions as the facts observed would warrant. But, in consequence of the objects being extremely numerous, and apparently most heterogeneous and discordant, their classification was found a much more difficult task than might be supposed. However, after examining and comparing, and arranging in groups over and over again the delineations, which with my notes recalled a vast assemblage of cases almost as forcibly to mind as if they were present—just as the *hortus siccus* of a botanist vividly reminds him of the more attractive objects of his study—a natural classification of venereal diseases at last occurred to me; and, following up my first notions on this important subject, it became evident, that there existed among all these affections the closest analogy; and that, although greatly diversified in their appearance, they are referable to one regular form of disease, and to a limited number of varieties, as fixed in their characters and relations as the varieties of any other disease."—*Preface*, vi.

Mr. Wallace was in London some two years ago, and we then had an opportunity of inspecting the drawings of the various forms of the disease, which he had procured from artists expressly engaged for that purpose. If published on a scale commensurate with their value, they will redound in an equal degree to the credit of the person who could entertain the design, and advantage of the public that should encourage its execution.

The first volume of the work, and this only is at present brought forward, is devoted to the consideration of the primary symptoms of syphilis, and bubo. The succeeding volume, which will be published at an early opportunity, will embrace the secondary symptoms, and the plates, which will be laid before the public in periodical fasciculi, will complete the whole. The first chapter of the present volume is occupied with the discussion of two general questions:—First, Are venereal diseases produced by a specific cause or morbid poison; or do they arise from common causes of irritation? Secondly, Are venereal diseases produced by one poison, or by a plurality of poisons? For reasons which we shall explain hereafter, we shall waive these inquiries for the present, and pass to the second chapter, which treats of the morbid states or actions produced by the direct application of the venereal poison.

Mr. Wallace is inclined to believe that the followers of John Hunter attribute to him opinions too exclusive on the subject of chancre, or the ulcerative form of primary syphilis. At page 215 of his work he remarks: "Venereal ulcers have *commonly* one character;" "a chancre has *commonly* a hardened base." The disciples of Hunter, however, attributing a certain collection of features to a syphilitic sore, and finding the sore so painted and so imagined, uncommon in the present day, conclude that the syphilis, which they assert was imported from America, is now seldom to be met with. Mr. Wallace justly observes, that supposing the case to be as stated, that Mr. Hunter did intend his description of chancre to be that of the true syphilitic sore, we are bound to reject that description if we do not find it borne out by facts; in other words, the contest lying between Mr. Hunter and Nature, we must in preference believe the latter. Of this there can be no doubt, and we trust that the day is past, for the authority of any man to command implicit and blind obedience.

Another fallacy, which in Mr. Wallace's opinion has materially retarded the advance of our knowledge of the venereal, is the old and deeply-rooted prejudice, that mercury is indispensable to the cure of syphilis. Those who entertained that opinion, finding it impossible to resist the facts that have been of late years brought forward, have been forced to fly for refuge to the fable, that the disease which indispensably requires this remedy no longer exists, and that the present fry of venereal complaints are not the genuine syphilis.

The remainder of the chapter is occupied with, *first*, an enumeration of the morbid states or actions produced by the direct application of the venereal poison; and, *secondly*, a classification of those morbid states and actions. We are averse to dealing with general questions at present, and yet we do not see how we can avoid these sections, without impairing the intelligibility of the subsequent portions of the work. We shall be as brief as possible.

Morbid States and Actions produced by the direct Application of the Venereal Poison.

Mr. Wallace observes, that if the venereal poison or those secretions which contain it are applied to a susceptible surface, there results, sooner or later, an accumulation of blood, and this is quickly followed, preceded, or accompanied by—1. Inflammation, which varies in degree, and may subside, leaving the part in a state of integrity, or lead to other morbid states: 2. A diminution of the extensibility, or perhaps a state of morbid contraction of the diseased tissues, from which phymosis, paraphymosis, &c. may result: 3. An increased and altered secretion into the subjacent parts, producing either the states of œdema or induration: 4. An increased and morbid secretion from the diseased surface, constituting the state commonly called gonorrhœa: 5. Excoriation, or removal of the cuticle, with a consequent morbid discharge from the denuded surface: 6. Ulceration, or the removal of more or less of the parts subjacent to the cuticle, attended, like excoriation, by a morbid discharge from the denuded and diseased surface: 7. Mortification or sloughing.

Our readers will, from this enumeration, perceive the grounds of our dis-

like to commence with general considerations. These if worth any thing, should be the expression of the detailed facts, or the sum of the special reasonings founded on facts advanced. But the reasonings and the facts are not yet before our readers, and, if we dissent from the author, we judge him before his case is fully stated—if we give his sentiments unchallenged, we seem to yield implicit assent to them. In the present instance Mr. Wallace makes the "venereal poison, or those secretions which contain it," a sentence, by the way, that seems tautological, to produce indifferently inflammation which ends in resolution, phymosis, excoriation, sore, or sloughing. We confess that we feel startled at this commencement, and we find it difficult to yield our assent to a doctrine that makes affections of so very different a character equally dependent on the venereal poison. The reasoning appended to the foregoing enumeration of the effects of the venereal poison is as bold as the enumeration itself.

"When the venereal poison is applied to a mucous surface, its local effects are generally limited to the morbid states, 1, 2, 3, and 4. Whereas, from its direct action on a cutaneous surface, one or more of the states 5, 6, and 7 result, in addition to the states 1, 2, and 3.

Now on reflection it would appear, that all the various effects produced by the action of the venereal poison are but links of the same chain; for the states 1, 2, and 3 are common to the states 4, 5, 6, and 7; while we find that the state 4 is a transition to 5, 5 to 6, and 6 to 7.

Although the phenomena exhibited by the states 5, 6, and 7, or excoriation, ulceration, and mortification, are in appearance very different, a little reflection will convince us, that in their intimate nature they are either the same or quite analogous. In fact, these states are all preceded by a morbid action, somewhat resembling inflammation, followed by an alteration of structure of the part, preparatory to its removal which sooner or later inevitably occurs, as the alteration it has undergone renders it unfit to remain longer in union with the body." 47.

This appears to us to be extraordinary reasoning. Because inflammation and its consequences, contraction and serous or solid effusion, are "common to" gonorrhœa, excoriation, ulceration, and mortification, therefore all are but links of the same chain, and all the result of a common poison! Mr. Wallace will pardon us when we observe that the argument appears to us to be obviously illogical and unsound. All the states which he has mentioned, excepting for convenience-sake gonorrhœa, are or may be the result of common inflammation, and do not per se imply the operation of any poison at all.

It is not the mere fact of there being an ulcer that proves the previous agency of a poison, but other phenomena connected with that ulcer, and succeeding it. If these phenomena are observed, they constitute the evidence of the application of poison, if not, the ulceration itself offers none. To prove the origin of phymosis from poison, we require precisely the same sort of evidence, that of attendant and consequent phenomena, which demonstrates the origin of an ulcer from poison. If that evidence be wanting, the conclusion is not warranted. But, says Mr. Wallace, inflammation attends ulceration, or phymosis attends sore, therefore, inflammation has the same cause as sore. This is obviously reasoning in a circle, and a very small circle too, and an analogical case will shew its fallacy. Inflammation of the Schneiderian membrane attends measles—the latter always arises from a specific contagion, and, if Mr. Wallace's argument be worth

anything, inflammation of the Schneiderian membrane must always arise from a specific contagion. We are not aware of having in the least misrepresented Mr. Wallace's argument, nor do we think we have pushed our reduction of it too far.

Again, Mr. Wallace remarks, that the state of gonorrhœa is a transition to excoriation—excoriation a state of transition to ulceration—and ulceration a state of transition to mortification. Thus mortification is an extreme degree of gonorrhœa, for if that be the first of a series of transitions, of course the last in the series is but the Ultima Thule of the first. But even if this were true, and it is palpably untenable, the argument would still be a logical fallacy. It is not, we repeat, the local action that, in the case of syphilis, constitutes the evidence of the application of a special poison—it is the tendency to constitutional contamination, and the consequent development of ulterior symptoms. If this be observed after gonorrhœa, as after an ulcerative or a sloughing sore, the singularity or identity of the producing agency is proved; if it be not observed, the circumstance of the local phenomena displaying transition states, even if it were true, proves nothing, save that the transition was, somewhere, so complete as to constitute an utter difference.

It may be said that by employing the term "transition" states, Mr. Wallace does not intend to affirm, that they differ merely in degree. But he has observed that the three first conditions are "common to" the four last, and that implies that they do not totally or greatly differ. The idea of transition states is after all a very strange and a very indefinite one. What, for instance, can be learnt or understood from the assertion that gonorrhœa is a transition state between phymosis and chancre, or between induration and mortification? We may be deficient in the faculty of apprehension, but we confess ourselves unable to see the clearness of Mr. Wallace's reasoning, or the grounds of his arrangement.

Mr. Wallace enters into an elaborate argument to shew that the loss of substance which attends ulceration is not attributable to the action of the absorbents, but that the process is more akin to that of sloughing. Mr. W. affirms that a change takes place in the part about to be removed, whether by ulceration or by sloughing, the only difference being, that in the former the change is less perceptible and the rejected portion liquified, whereas in the latter the separation occurs in thick and visible portions more or less solid. As this is in some measure an abstract question, we shall waive its consideration, but we would venture to remark that, although the onus probandi is on Mr. Wallace, we do not think his arguments conclusive. This however, is mere opinion, and as our readers are not presented with Mr. Wallace's facts and reasoning's, we can claim no right to pronounce upon them.

It is fortunate for the elucidation of truth, that those who entertain peculiar opinions on subjects difficult of proof, have an opportunity of strengthening them, if correct, or finding the difficulty of supporting them if incorrect, in their exposition and application. Take, for instance, the following passage.

"Were Mr. Hunter's opinions of the process of ulceration correct, as in his judgment ulceration implies absorption, contamination of the system should always follow ulceration; but, as we know that this is not the case, we might

almost infer, from this circumstance alone, that ulceration is not caused by absorption. Mr. Hunter was himself well acquainted with the fact, that contamination of the system did not necessarily succeed a chancre, and therefore he admitted that a chancre was a local sore; but, in making this admission, he evidently contradicted his own hypothesis respecting ulceration; for if this process be an act of the absorbents, it is clear, as has been just said, that from the moment at which ulceration first commences, absorption, and consequently contamination of the body, also commences; unless we admit that the venereal poison may be received into the mass of circulating fluids, without necessarily causing constitutional disease,—an admission however which we are not warranted in making.

On the other hand, according to the opinion here entertained of the process of ulceration, it is evident that a chancre may exist without absorption, and therefore without contamination of the system. I would even go farther, and affirm, that it is extremely probable, that so long as the process of ulceration continues, no absorption can take place from the ulcerating surface; and, consequently, that contamination will not occur, until after this process has terminated on either a portion or the entire of the diseased surface. We know that the state of inflammation precedes and accompanies ulceration, and that the action of the absorbents of inflamed tissues is either suspended altogether, or very greatly diminished. To this we may add, that it is extremely improbable that the absorbents of a tissue, either in the state or passing into the state of ulceration or sloughing, are in a fit condition for performing the functions of absorption. It must at least be admitted to be very unlikely that any substance applied to the surface of a sore can be absorbed during ulceration, if we reflect that all ulcerating surfaces are formed of a tissue which is *in transitu* from the state of a living texture to that of an inorganic fluid; and it is quite possible, that although this substance may form a stratum almost inconceivably thin, it may still be sufficient to obstruct absorption.

It will no doubt be affirmed, in opposition to this opinion, that absorption from the surface of ulcers, and consequent impregnation of the system, is notorious. Thus, salivation from mercurial dressings to sores, very frequently occurs. But will it not be found that in all such cases the process of ulceration has actually ceased, on the whole or on part of the surface of the ulcer; and that the surface from which the absorption has taken place is a granulating and not an ulcerating surface?" 53.

In the passage we have extracted there is more than one fallacy, and there are many difficulties. And first for an example of a fallacy. It is not correct to state that if ulceration implies absorption, contamination of the system should always follow ulceration. This presupposes two things, neither of which is proved; first, that the ulceration is always the result of a specific poison; and, secondly, that if the poison be absorbed the constitution must necessarily display evidence of contamination. With reference to the first point it is certain that the slightest excoriation may, if injudiciously irritated, become a troublesome ulcer; and with respect to the second, we may observe, that as all are not susceptible of small-pox, even when the poison is directly applied, so there is no inconsistency in supposing that all are not susceptible of syphilis, and the contrary has not been proved.

The difficulties attending Mr. Wallace's theory of the absorption of the syphilitic poison appear to us to be more formidable than those of the notion he has rejected. If ulceration be a process similar to sloughing, it is difficult, nay impossible, to conceive how the poison can linger in the sore, and only be absorbed after the ulcerative process has ceased. The venereal

poison is applied to the prepuce, a sore ensues, that sore is dressed and washed frequently, its surface is thrown off a greater or less number of times, or to a greater or less depth, and yet after all this is over the poison is for the first time carried into the system. Where the poison lurked, and how and why it should operate now, are circumstances which are incomprehensible to us. Setting aside this important consideration, we are presented with no proof that the poison only acts on the constitution after the cessation of the ulcerative action. To say that it is unlikely that absorption can take place during ulceration, because the ulcerating surface is formed of a tissue which is in transitu from the living to the inorganic state, is clearly a petitio principii. Those who are not inclined to grant an unproved premiss, will probably not be disposed to grant a conclusion drawn from it. All questions of this kind must be decided by facts, not by an ingenious accumulation of suppositions, some more some less susceptible of proof. Mr. Wallace argues that it is extremely improbable that the absorbents of a tissue either in the state, or passing into the state of ulceration or sloughing, are in a fit condition for performing the functions of absorption. We have no hesitation whatever in replying, that however improbable this may seem, it is undoubtedly the fact. If arsenic be applied to a sore, the constitution will be specifically affected, at the very time that the arsenic is acting as a local escharotic, and occasioning sloughing. We have many times seen the oxymuriate, applied in the form of ointment, produce a high degree of local inflammation, ulceration, and even sloughing, whilst the constitution was becoming mercurialized.

Mr. Wallace draws from the views to which we have been adverting, the following practical conclusions:—

"1. If by any means the poisonous quality of an ulcer, produced by the direct application of the venereal virus, can be destroyed, before the process of ulceration has ceased in any point of the ulcer, the contamination of the system will be prevented.

2. If from the violence of inflammation a process of sloughing commences in a chancre before the action of ulceration has ceased upon any portion of its surface, and if this process involves the structure of the part beyond the point of contamination, it may form not only a natural cure of the local disease, but may also prevent contamination of the system. Gangrenous or sloughing chancres afford common examples of the truth of this assertion; and it should be observed in support of this opinion, that it is admitted, that when the gangrenous or sloughing process attacks venereal sores in their earlier stages, it much more frequently prevents contamination of the system, than when this process does not commence until after the chancre has been for some time in existence.

3. Should a bubo occur, in consequence of a chancre, before the ulcerating process of that chancre has ceased, it is more likely that such a bubo has been produced by irritation, than by absorption of the virus. Indeed, this fact is tacitly admitted by those who have most experience in venereal complaints; for it is allowed, that buboes are most apt to occur after a lapse of some time from the formation of a chancre; and it is also admitted, that the longer a chancre has continued before a bubo has been produced, the more likely is such a bubo to be a forerunner of constitutional symptoms. In fact, it is more than probable, that a bubo cannot occur from absorption, until the process of ulceration has ceased in a greater or lesser portion of a chancre; and if any tumefaction of the neighbouring glands should be observed prior to this period, we may perhaps fairly conclude, that it has been produced by sympathetic irritation. At the same time, the great difficulty which will be always found in distinguishing be-

tween a surface, upon which the process of ulceration has not ceased on any possible point, and that upon which this process may have partially ceased, will always prevent a prudent practitioner from acting upon such views with too much security." 54.

To us some of these practical conclusions appear to be rather in the teeth of his doctrines, than fairly deduced from them. But we must pass on. We are next presented with a—

Classification of the Morbid States and Actions produced by the direct Application of the Venereal Poison.

Mr. Wallace observes that the several morbid states or actions enumerated already are generally collected into certain groups of symptoms, which have been referred to one of two classes of disease—gonorrhœa or chancre.

"However distinct from each other the chancrous and gonorrhœal forms of venereal disease may appear to be, it is always to be remembered, that they are only modifications of the same specific morbid action, arising from the same exciting cause, and not different species of disease,—consequently, we shall not be surprised to observe, that they are sometimes combined, or that they reciprocally produce each other, or that their influence on the constitution may be similar. And while we admit that this aptitude to combination, reciprocal causation, and similarity of consequences, are all powerful arguments in support of the doctrine of identity of original cause, or of the unity of the venereal poison, we must also admit them as a proof, that a classification of venereal diseases, under the heads of gonorrhœa and chancre, even if such a classification was sufficiently comprehensive, is highly objectionable; because the varieties of the same disease should not be designated by names having no analogy, as such a nomenclature cannot fail to perpetuate in the mind the erroneous supposition, that the maladies they express are essentially dissimilar, and not the result of the same cause. We must, therefore, endeavour to class venereal diseases in a manner more comprehensive, and more conformable to their natural relations." 57.

Here we see that Mr. Wallace openly and unhesitatingly maintains that syphilis and gonorrhœa arise from the same morbid poison. We will not repeat the arguments against this opinion, which have frequently been urged and never satisfactorily answered. We will merely observe that here, as on other occasions, Mr. Wallace begs the question. We have had no proof, unless the paragraphs on the transition states be considered such, of the common origin of sore and gonorrhœa, and we find no reply to the ordinary objections against such a theory. Mr. Wallace does indeed adopt an inverted argument, and urges in support of his opinion that gonorrhœa and chancre are sometimes combined, which is true—that they reciprocally produce each other, which is very doubtful—and that their influence on the constitution may be similar, which is directly opposed to common observation. The only acknowledged fact is, that sore and gonorrhœa are sometimes combined. When we reflect that females affected with sore and continuing to have connexion, as they constantly do, are very likely to contract gonorrhœa in addition, and, on the other hand, that these same females thus doubly infected may, in their turn, doubly infect, we repeat that when we consider this we see no reason to attach great weight to this the only general and indubitable fact adduced. The important and practical consideration opposed to the identy of the cause of syphilis and gonorrhœa, is

the circumstance, that one, as a general rule, does evince a remarkable disposition to affect the system, and the other does not. But to proceed.

" When venereal diseases are contemplated with a view to their classification, a question naturally arises, whether any of the numerous and varied morbid actions or states produced by the direct application of the venereal poison, or any peculiar combination of these states, should be considered as being more particularly the legitimate effects of this poison?

The inoculation of the vaccine poison, like that of the venereal poison, produces numerous varieties of disease; yet we are in the habit of affirming, that one of these varieties deserves to be considered, in preference to the others, as the regular or legitimate vaccine disease. Should not the same law hold in regard to syphilis, which is, like vaccina, produced by a morbid poison? The answer is evident. The only question therefore is, which of the varieties of syphilitic disease should be considered the legitimate form, or primitive type? and which the irregular forms or degenerations? Or, in other words, what are the characters of syphilis, when regular in its progress, and what are the characters of those diseases which are to be considered its varieties? These questions will hereafter be answered in detail; but it may be now mentioned, that the disease, which in the following work is considered the original type or specific form, and of which all the other forms are viewed as degenerations, presents, when compared with these supposed degenerations, the following characters; which seem quite sufficient to stamp it as the specific or legitimate form of primary syphilis.

1. It exhibits in a combined and perfect state, and in a medium degree, that series of destructive and restorative actions, which are exhibited by the other forms of the same disease in an irregular manner, and without any defined proportions.

2. From it, as from a centre, the varieties branch out on either side, gradually decreasing in severity of destructive action, until they arrive at that state of disease, which consists in a morbid secretion without ulceration; and on the other hand as gradually increasing in severity, until they lapse into those forms of disease, which exhibit the most malignant ulceration or gangrene.

3. It is more easily propagated by artificial inoculation than any of the other forms of venereal disease. This is owing to its independence of contingent or accidental circumstances; and hence it is probably the form of primary syphilis which would invariably occur, if the action of the poison was uninfluenced by any such circumstances; whereas, we often fail in producing the other forms of venereal disease, because they are partly the result of accidental causes, which may not be present at the time of inoculation.

4. It is the most common form of syphilitic disease. The great frequency of discharges from the urethra does not contradict this observation, for these discharges may be easily accounted for by the facility with which any irritating secretion in the female, although not syphilitic, produces morbid secretions of the male urethra, which in our present state of knowledge we cannot perhaps always distinguish from such discharges as are caused by the syphilitic poison.

5. We shall hereafter find, that there is a form of venereal eruption or constitutional disease, which, according to its general relations or characters, as compared with other constitutional venereal eruptions, should be considered the legitimate form of eruption, upon the same principles that a certain form of primary disease is here considered to be the legitimate form; and this constitutional eruption exactly corresponds in its characters to the disease, which is assumed to be the regular form of primary disease. This analogy, between the primary and secondary disease, is conformable to that general law of similarity between primary and secondary symptoms, which governs the action of several morbid poisons; and may be received as an additional argument in proof that the form of disease under consideration is the specific form, or regular type of

both primary and secondary syphilis when seated on the skin. It is not, however, to be supposed that the regular form of primary syphilis is uniformly or necessarily followed by the regular form of eruption. 59.

We know not how it is, but it so happens, that we cannot turn over a page of Mr. Wallace's book without finding debateable matter. We are usually averse to the arguing of general questions, but it is evident that, if we allow the opinions advanced and the premises laid down by Mr. Wallace to pass unquestioned now, we permit him to erect on a basis that we deem most fallacious his whole superstructure and system. We must say that there is a general laxity in Mr. Wallace's mode of reasoning, that renders it difficult to combat him. He seems to slip into a conclusion before the reader is aware that he is seriously aiming at it. What can be more vague than his analogy between the vaccine disease and the venereal? A vaccine vesicle which follows a certain progress is said to be regular and legitimate, because it is observed to follow such a course in the immense majority of instances, when obviously disturbing circumstances do not interfere. But Mr. Wallace's specific or legitimate sore is assumed to be such, because it is intermediate in degree between other affections, because it is more easily propagated by artificial inoculation, and because it is the most common form. The first reason will not bear examination—the second is more likely to be erroneous than correct, for gonorrhœa, which Mr. Wallace makes a form of syphilis, is probably more easily communicated than any kind of sore, and the experiments on the inoculation of venereal ulcers are obviously imperfect—and the third reason is also inconclusive, as, setting aside the greater frequency of gonorrhœa, it is an assumption to assert that, because one kind of sore is rather more common than another, it must necessarily be the true and specific type.

Mr. Wallace now passes to the description of the particular forms of sore, to the description, in fact, of the venereal disease as it presents itself in nature. However we may differ from Mr. Wallace in his general views, we shall have occasion to bear ample testimony to his accuracy of observation and fidelity of detail. We cannot, in this number, proceed with the present review, but in our next we shall have the pleasure of presenting an analysis of the remainder of the volume. Mr. Wallace will find that none can be more willing than ourselves to do justice to his labours.

III.

1. Mémoires, ou Recherches Anatomico-pathologiques sur diverses Maladies. Par *P. Ch. A. Louis.* A Paris, 1826. —Memoire sur la Péricardite.

2. Clinique Medicale. Deuxième Edition. Par *G. Andral.* —Observations sur les Maladies du Pericarde.

It is to the researches of Louis, published in the Révue Medicale, that we are indebted for the first satisfactory mode of diagnosis of pericarditis, and the additions which have been since made to its pathology and treatment have added but little to the information therein contained. The general similarity of the symptoms caused by diseases of the heart and its appendages —the frequency of the occurrence of the affection which forms the subject of the present paper, in connexion with diseases of the heart itself, or the other thoracic organs—the absence (in some cases) of any very obvious signs of its existence, or what is termed its latent form—and the imperfect examinations made of individuals suffering from the affection, constitute the chief causes of the obscurity which has been considered as belonging to this disease. The works of Morgagni, containing, as they do, some of the first accounts of the existence of such a disease, leave us in doubt as to the mode of its diagnosis; the later examples recorded by Corvisart, Bertin, &c. although much more satisfactory, are still insufficient on the same grounds; and even Laennec, after a minute description of the anatomical characters of the disease, confessed that there was still wanting a diagnostic sign of inflammation of the pericardium; those on which he might place the greatest reliance being sometimes caused by other affections of the heart or its appendages. The attachment, and perhaps too exclusive reliance, of this great pathologist on the evidence afforded by the stethoscope, may have made him overlook, or estimate too lightly, the signs on which the present essays prove that the chief confidence is to be placed.

M. Louis' Essay, re-printed, with some additions to the original one, contains the minute details of some cases which have fallen under his own care, and an examination of those which are recorded in other works; and by a careful induction from which, he has established a certain train of symptoms as characteristic of pericarditis, which may be said, at least in the majority of instances, to render its diagnosis a subject of comparative facility. Subsequently to the publication of his essay, M. Andral has recorded, in his Clinique Medicale, the histories of nine cases of the disease, which it will be seen by a comparative analysis are confirmatory of his views; together with two examples of chronic pericarditis, a subject which has not been separately treated by Louis, unless we may consider the duration of some of his cases as fairly entitling them to such a distinction. The absolutely latent state in which, in some instances, pericarditis has been found to exist (by Andral, Rostan, Dr. Latham, &c.), and when the whole of the morbid phenomena which shewed themselves during life appeared to be attributable to inflammation or ramollissement of the brain, but when, upon examination, the brain appeared to be in a perfectly normal state, and the pericardium

exhibited signs of inflammatory action, is of very rare occurrence, and, however inexplicable, should not be allowed to diminish our confidence in those symptoms which are found in the great majority of cases, to be connected with the disease, where examination after death has afforded the means of their confirmation. Is it not probable that, in some instances of this kind, the inflammation which occurs in the pericardium may be of a similar character to that inflammation which is not uncommonly set up in serous membranes, during the last few days or hours of a patient's existence who is suffering from a chronic disease, and in whom no suspicion has been excited of its presence, until it was evidenced by an examination after death?

We commence our notice of this Memoir by an analysis of two cases of pericarditis, without complication, the histories of which are very minutely detailed.

1*st Case.* The affection commenced in a healthy young man, aged 27, by an acute pain in the præcordial and epigastric regions and between the shoulders—palpitations—dyspnœa; the palpitations ceased after three days' duration, the pain continuing more or less acute at intervals; constant oppression, becoming more considerable about the 8th day; pulse exceedingly irregular; beat of the heart dull, distant, and often doubtful; cough and expectoration slight; very evident tumefaction of the thorax at the præcordial region, of considerable extent, over the whole surface of which a dull sound is yielded by percussion, and the respiratory murmur is inaudible; percussion sonorous and respiration perfect over the remainder of the chest. With these symptoms were associated infiltration of the limbs, gradual diminution of temperature, extreme dyspnœa: death occurred two months after the commencement of the disease; colliquative diarrhœa having somewhat hastened its termination. The principal, and almost the only morbid appearances were a thick false membrane, poured out from the whole surface of the pericardium, which contained about a pint and a half of a red and turbid serum.

We find, in this case, that the connexion between the disease and its symptoms is so evident, as to render any comment almost unnecessary: the pain corresponded with the parts affected, and depended on the same cause as the palpitations and dyspnœa; the rapidity of their appearance was owing to the sudden accession of the inflammation; the almost constant irregularity of the pulse indicated a very serious lesion of the central organ of the circulation; percussion and auscultation served to confirm a diagnosis, which, even independently of their assistance, might be considered as unquestionable.

The projection of the ribs in the præcordial region forms one of the most peculiar circumstances in this case. Should it be found to exist in other instances, it will become one of the most important diagnostic signs. Here, there was no anormal change in the structure or conformation of the ribs, by which such a circumstance might be explained, and it only corresponds with a similar effect produced by effusion consequent on pleuritis. Its cause would naturally appear to have been the effusion into the pericardium; but this, as well as the reliance which may be placed on it as a sign, can be decided by observation alone.

The decisive character of the symptoms here enumerated, *i. e.* the sudden

appearance of violent pain in the præcordial region; palpitations; dyspnœa; irregular pulse, with the signs afforded by the stethoscope and percussion, and these occurring in a subject previously in perfect health, render it difficult to confound this with any other affection of the heart; and an unpardonable negligence alone could account for its being mistaken for any pulmonary affection.

Among the secondary signs in this case, the state of the digestive organs was in perfect harmony with that of those primarily affected. The mucous membrane of the stomach and small intestines was of a red colour, but of healthy consistence and thickness, a condition which it is quite unnecessary to say was not inflammatory; that of the colon was thickened and softened, an inflammatory state which readily explained a diarrhœa which had existed a considerable time previous to death. The distended pericardium might be considered as the cause of cough; but this was more probably dependent on some granulations, which were developed in the summit of the lungs.

The second case, with the exception of a few unimportant varieties, affords a complete analogy with the first. Its subject was a female, aged 47, in whom, after great mental anxiety and bodily fatigue, the affection suddenly commenced by an acute pain in the præcordial region; a sensation of constriction and palpitations. An intermission of three days occurred in the symptoms, after which they returned, with gradually increasing oppression, obliging the patient to observe an almost upright position. On the 26th day of the affection (the first on which she was brought to the hospital), together with these symptoms, the pulsations of the heart were tumultuous and unequal; pulse irregular and often intermittent; chest sonorous in its whole extent, except at the præcordial region, which rendered a dull sound on percussion. Some cough, and crepitation at the lower part of the right lung indicated a slight complication of peripneumony; but while this remained stationary, the symptoms depending on affection of the pericardium went on increasing rapidly. The lower extremities became œdematous, their temperature diminished, and on the 37th day after the attack the patient died, in state of suffocation. The almost only morbid appearances presented by the examination of the body were, a thin and pale membrane, enveloping the whole surface of the heart, and a reddish effusion, of about a pint, into the pericardium.

With the exception of the dilatation of the præcordial region, of which, in this case, I can neither assert nor deny the existence, this example of pericarditis almost exactly resembles the preceding. Its course was somewhat more rapid, but the character of its symptoms was the same, and from this circumstance I am disposed to believe that we may consider as pathognomonic signs of pericarditis—a more or less violent pain in the præcordial region, the access of which is sudden, accompanied by oppression and palpitations, varying in degree; irregular or intermittent pulse; then, after a longer or shorter period, a totally dull sound in the region of the heart, the rest of the thorax rendering a clear sound on percussion. Every time that this assemblage of symptoms presents itself, in a subject *previously quite in health*, we may conclude that pericarditis exists. The absence of pain, provided the other symptoms exist, should cast but little doubt on the diagnosis; for the question can only be between pericarditis and hydropericardium, the latter affection developing itself less rapidly, and without

the connexion of symptoms already mentioned. A very chronic form of inflammation of the pericardium would much increase the difficulty of diagnosis. The œdema and diminution of temperature are symptoms common to this affection and diseases of the heart, and they form a line of demarcation between such diseases and affections of other organs. In these two cases, the general correspondence of symptoms was not accompanied by a correspondence in the morbid productions. In the former, the false membrane was thick, formed of two distinct portions effused from the whole surface of the serous membrane; in the latter, the heart alone was covered by a thin coating, interspersed with granulations.

I have seen, besides, five other cases of pericarditis; three of which died so soon after their entrance into the hospital, that no enquiry into the symptoms was made; the fourth was a fatal case of acute ramollissement of the brain, in which palpitations and a very irregular pulse were found to exist with partial pericarditis; the last, a case of phthisis, the pulse having been very irregular for thirty days preceding death, and in which the pericardium was found inflamed. In these instances the want of a careful examination, and not any peculiar difficulty in the diagnosis, probably explains the occurrence of death, without any suspicion having been excited of the existence of inflammation of the pericardium.

There are 36 cases of this disease cited in the works of Morgagni, Corvisart, MM. Bertin, Tacheron, Leroux, and Boyer, among which more than two cannot be selected, in which a proper examination was made. The remainder are incomplete, partly owing to imperfect observation, partly to the circumstance of the patient's not having been seen until a very short time before death, but they are nevertheless useful as confirming the symptoms which I have adduced as characteristic of pericarditis, and as tending to throw light on other points in the history of this disease.

From the cases of Morgagni, none can be collected in which the entire combination of symptoms was observed, and they are consequently almost valueless as regards the establishment of a correct diagnosis. The same objection may be made, with some limitations, to the cases which are contained in the works of Corvisart; (sur les maladies du cœur)—for although he has taken great care, and employed his usual powers of investigation, there are some essential points quite overlooked. Of the eight cases which he has related, four are complications of pericarditis, with pleuro-pneumonia; in three of these there was pain, always on the left side and with one exception, in the præcordial region, although in one instance the pleuro-pneumonia existed on the right side. In another case, in which the pericarditis was uncomplicated, the præcordial region was the seat of pain, in the remaining observations no notice is taken of this symptom. Palpitations are mentioned as having occurred in one case only—irregular, intermittent, and unequal pulse in six—occasional short attacks of faintness in one case—in three, one of which was simple pericarditis, the other two complications with pleuro-pneumonia, the anxiety and sense of suffocation was extreme. In three cases alone of the eight was percussion practised, and in two of these without the requisite care. For instance, in one case of simple pericarditis, the chest having been percussed on the 6th day of the affection, it is said that the whole of the left side gave a dead sound. The assertion that, in a simple case of pericarditis, so large a surface rendered a

dead sound, is one which almost carries with it its own contradiction, and it affords an instructive lesson of the importance to be attached to this means of diagnosticating pericarditis (when properly employed), as there can be no doubt that a certain evidence of its existence would have resulted from carefully observing the obvious sources of error.

Some may object to the degree of importance which I attach to the evidence afforded by percussion, from the frequent complication of pericarditis with such affections of the lung as give rise to similar signs. Such an objection must be admitted as tenable whenever there is double pleuritis or pleuro-pneumonia, or if either of them exist on the left side; but, in other cases, the value of percussion is as great as when pericarditis is quite uncomplicated; and that such cases are not of uncommon occurrence may be deduced from the following circumstances, that of seventeen cases of pericarditis complicated with peripneumonia (related by Morgagni, Corvisart, and Bertin), six were of pleuro-pneumonia of the left side, five of both sides, and the remaining six of the right side. Thus, in one-third of these cases, percussion might have been most advantageously employed; but of the 36 cases at present under consideration, twelve are of simple pericarditis, and, by adding these to the previous six, there remains no less than eighteen cases in which percussion might have been advantageously employed.

Another objection to this mode of diagnosis, is founded on the assertion that, in the majority of instances, the quantity of the effusion into the pericardium is insufficient to produce an obscure sound in the præcordial region. Such an objection is not supported by an appeal to facts. Among these 36 cases, the effusion was rarely less than eight or ten ounces, and we must admit that this quantity would suffice to render the sound on percussion obscure, since Corvisart records a case in which only a little fluid was found in the pericardium after death, and where percussion had rendered distinct evidence of its existence. *Pain* is not mentioned as a symptom of universal occurrence. Corvisart and Bertin have not noticed its existence in more than half the cases which they have published, and such would appear to be about its proportion from cases subsequently related.

With regard to the irregular action of the heart, showing itself by irregular pulse, I am disposed to consider it as a valuable symptom of the disease, but that it may be duly appreciated it is necessary to examine the circulation frequently, since it is a condition which may exist without being continuous, and it is probably owing to this circumstance that those who have written on pericarditis have not given to the irregular state of the pulse, that importance as a sign, which it appears to me to deserve.

Fainting is comparatively rare, so much so as not to merit any mention as a symptom. Of the 36 cases, in three only was fainting observed; and it constitutes too alarming an occurrence to suppose that it can have been overlooked.

Palpitations are frequent, though from their comparative insignificance they have not been commonly noticed.

The dyspnœa which exists in all cases cannot be estimated as a sign of any value, since it is common to this and any other thoracic affection; nevertheless, its sudden accession without any evidence of acute pulmonary affection deserves the attention of the physician, and should rouse his suspicions as to whether its cause may not be in a lesion of the pericardium.

Among the remote affections, and one which is common to this and other diseases of the heart, is œdema of the lower extremities—a condition which existed in the two cases mentioned in the commencement of this paper.

From what has been stated, concerning the frequency of the cases in which irregularity of the pulse and pain in the præcordial region co-exist with an obscurity of sound on percussion of the same part, we are justified in concluding that pericarditis may be recognised in about half the cases in which it occurs, and that in many of the simple cases it is as easily recognisable as the best marked example of pleuritis.

It is difficult to state any thing precise as to the duration and progress of pericarditis, but from some facts mentioned by Corvisart and others, taken in conjunction with those at the beginning of this Essay, we are led to the conclusion, that at its onset the disease is generally violent, that the symptoms soon diminish in intensity, and that death takes place between the 24th and 80th day from the commencement. (We shall presently see that to estimate 24 days as the shortest duration of acute pericarditis is not borne out by subsequent investigations.)

The prognosis of pericarditis is a subject of much difficulty. Its complication with other diseases of an equally serious if not more alarming character, accounts for this difficulty. By estimating from the examination of 670 subjects indiscriminately situated, some of which I have personally examined, and the histories of others I have selected from various sources, (in a certain proportion morbid appearances indicating inflammation of the pericardium, such as old adhesions, or the result of more recent inflammations being found to exist,) I have been led to conclude the probable proportion of fatal cases of pericarditis to be one of every six in which this lesion occurs.

Its causes are enveloped in much obscurity. Women are less frequently affected with it than men, and it appears to occur oftener in youth and old age than during the intermediate period of life. There seems to be some ground for the supposition that affections of the heart have some influence in the production of pericarditis, from the comparative frequency in which the morbid effects of this inflammation are found in connexion with other diseases of this viscus. Corvisart relates a case in which it followed a blow, and Bertin in which it appeared subsequently to great exertion. In one of the cases mentioned in this paper it was preceded by fatigue and anxiety. From the frequency of its occurrence, in connexion with pleuro-pneumonia, it is probably excited by similar causes, and may be subject in such cases to its influence.

The cases and remarks contained in this Clinique Medicale of Andral are generally confirmatory of the views contained in the previous part of this paper. In order to avoid prolixity or any useless repetition, we will shortly analyze the nine cases which form the ground-work of Andral's opinions; and, in doing so, we will follow the arrangement of symptoms which Louis has adopted, omitting such as are common to all affections of the heart; and first, with regard to—

Percussion. In five only of the nine cases here related was percussion employed, although effusion existed in all excepting one. Of these five one was a suspected case only, the patient having recovered; in three, a

death-sound was detected at the præcordial region, and after death considerable effusion was found; in the last, the sound on percussion was normal, and the chief morbid appearance was false membrane lining the pericardium; the quantity of effused fluid not amounting to one ounce. (It is important to remark, that in each case, in which the signs afforded by percussion were so distinct, the inflammation of the pericardium was uncomplicated with any other disease within the thorax.)

Pain. Of the nine cases four only were accompanied with pain, one of these being the case which recovered. The pain was not of the same character in all; in the first case, which was of so violent a character as to terminate fatally in 24 hours from its commencement, it was an acute tearing pain; in another instance it extended down the arm, and resembled very much the phenomena of angina pectoris.

State of the pulse. In three cases, the state of the pulse is not mentioned; in two it is said to have been regular and remarkably hard; in the remaining four very irregular and intermittent.

Fainting is not noticed in any case, although some are examples of the most acute form of the disease. *Palpitations* are not noticed.

Dyspnœa is a symptom of universal occurrence. One case is related in which dyspnœa existed as the only symptom.

With regard to the duration of the affection, several cases are mentioned of a far more acute character than those from which M. Louis has drawn his estimate of the average length of the disease. One terminated in 24 hours from its commencement, and three others in less than six days. Of those cases in which pericarditis must be considered as the cause of death, the disease being uncomplicated, four died out of five.

With regard to the causes of the disease, one of comparatively frequent occurrence appears to have escaped M. Louis' notice; *i. e.* metastasis of rheumatic inflammation. The two most severe cases mentioned by Andral followed the subsidence of acute articular rheumatism. One occurred in an advanced stage of phthisis—one in a patient with confluent small-pox; and the rest could be attributed to no cause.

The comparative frequency of the disease affecting one sex mentioned by Louis is confirmed by Andral's cases. Of the nine, one only was a woman; the remainder were young men, mostly between the ages of 20 and 30.

The diagnosis of pericarditis, when complicated with pulmonary or pleuritic inflammation, has not appeared to the authors of the present essays to be worthy of any separate attention, as when they do occur their symptoms are for the most part so unequivocal, as to render the probability of mistake very far from likely to happen, and even should either the one or the other be overlooked, the similarity of the treatment adopted in either case must render such an omission comparatively unimportant. When doubt does exist as to the locality of the thoracic affection, it is by negative evidence, "par voie d'exclusion," that the diagnosis must be determined.

The subject of the stethoscopic signs has also received a very cursory notice, from which we must conclude that the indications which they afford

are not of much value—the heart's impulse is sometimes increased, at others jerking, or obscure. What Laennec says on the subject appears to comprise nearly all the information hitherto obtained—"that the ventricular contractions are characterised by a more marked impulse and sound than in the natural state, varying at indefinite intervals with weak and short pulsations, corresponding with the intermissions of the pulse, the weakness of which contrasts strongly with the force of the heart's action." A sound which its discoverers have designated by the term "bruit de cuir," similar to that produced by rubbing two surfaces of leather against each other, has been mentioned as always existing in those cases in which false membranes, or adhesions, are formed between the pericardium and heart, without the co-existence of any effusion. This has been particularly noticed in cases of chronic pericarditis; and however we may be disposed to reject it, at present, as a certain sign of what it is supposed to indicate, it appears to be deserving of careful investigation. Another sign obtained by auscultation, which is said by a late pathologist to be universally present in pericarditis, is the bellows murmur. As the degree of confidence which is to be placed in this phenomenon, as an indication of any pathological condition, is very uncertain, it is difficult to decide how far it may be admissible as an addition to the list of auxiliary symptoms, although, when occurring in combination with other characteristic signs, it may not be without its value.

The subject of treatment of acute pericarditis has received from Louis the attention which might be expected from one who appears to consider almost the whole of medicine as comprised in diagnosis. Very moderate general and local treatment, slight counter-irritation, with abstinence and rest were the means employed in the two cases which are related in the commencement of his essay; and when speaking generally of this subject, he hazards only the following remarks—that from the cases on record nothing decisive on the subject of treatment can be stated; that from the exacerbations of symptoms, which, in the cases which he has related, followed any excitement, whether the most simple motion or the slightest cough, it is evident that absolute rest constitutes one of the most important principles in the treatment of pericarditis.

The later details of Andral, although entering more fully into the means of cure, contain but one example out of the nine cases, in which those means were successful in putting a stop to the disease. From this case he proves the necessity of guarding carefully against too much presumption, in supposing that a considerable alleviation of the symptoms is to be accompanied with any diminution in the activity of treatment, as in this affection more than in any other, he considers that, after such alleviation, a return of acute, or a substitution of chronic inflammation is to be anticipated. The chief means employed, as recommended by Andral, are, copious general and local depletion, with digitalis during the early stage, and subsequently various modes of counter-irritation, together with auxiliary means, which must be evident to every practitioner.

In addition to the pages which in the Clinique Medicale are devoted to acute pericarditis, is a short notice of the disease in the chronic form, a subject which has not received a separate attention from M. Louis. Its symptoms (says Andral) are those chiefly of an organic affection of the heart. We will shortly quote the two cases recorded—the first is that of a mason,

aged 25, who in December, 1823, caught a cold, which was accompanied with dyspnœa, and towards the end of January, with œdema of the lower extremities and ascites. At the end of February, his face and lips were livid—there was œdema of the lower limbs—ascites—short and quick respiration—mucous râle over various parts of the chest, which sounded well on percussion—cough and mucous expectoration—heart natural in its impulse, but as well as the pulse, intermittent—never any pain in the præcordial region—tongue and appetite natural—dyspnœa very much increased by taking food—diarrhœa for three months—urine reddish—skin dry. (Blisters to the legs—stimulants, frictions, and fumigations—diuretics.) These means produced a temporary alleviation of the symptoms, which recurred with aggravation on March 5th, when the upper limbs became œdematous—orthopnœa—pulse very small and remarkably irregular—diarrhœa without pain—death on March 10th, quite sudden and without any new symptom or aggravation. After death, the whole pericardium was found to be adherent to the heart by membranous deposits of an inch in thickness, enveloping the heart like a shell—no other particular morbid appearance.

The second is a case of a man, who in April, 1825, became suddenly affected with palpitations, dyspnœa and fever. He was bled several times and improved under this means. Sometime after he applied for relief, his only symptom being extreme frequency of the heart's action, the pulse being regular and of ordinary force, but 140 in a minute; œdema of the lower limbs commencing. (Blisters to the legs, digitalis and diuretics.) Pulse not affected; no increase of urine; vomiting, which necessitated the discontinuance of the medicine. Œdema increased—ascites—infiltration of the face—dyspnœa—pulse as before—effusion into the pleura characterized by the usual symptoms—death in a few days with colliquative diarrhœa. The same membranous deposits were found in this as in the former cases, interspersed however with small, whitish particles, resembling in some places purulent, in others tubercular matter—sero-purulent effusion in the left pleura—tuberculous deposits in old adhesions of the right pleuræ—effusion into the abdomen.

In comparing these two cases, we find, as points of resemblance, 1st. the same morbid change; 2d. the same infiltration, and other symptoms indicating organic affections of the heart, but the onset of the diseases is different; in the second there is an acute stage which is absent in the first; in the first the pulse is intermittent and irregular, in the second it has a frequency which is unusual in organic affections of the heart, and which lead to the diagnosis of pericarditis. But, bare and unsatisfactory as these symptoms are, we must still confess that there are cases of chronic pericarditis in which no symptom gives rise to the suspicion of its existence, and of which examination alone can afford the proof.

A few remarks on the morbid anatomy of pericarditis will conclude our notice of the present essays. *Redness*, a sign which alone constitutes no proof of inflammation, is not universally present, and when it does exist, is always slight, and generally punctuated, covering the pericardium as it were with spots of blood very nearly approximated to one another. In the most acute specimen of pericarditis, the pericardium itself is generally unaltered, or is at most slighly thickened or opaque. *A large quantity of fluid* is the ordinary effect of pericarditis; in one case (mentioned by Corvisart) it

amounted to four pints; this fluid is sometimes a limpid, sanguineous serum, or of a deep red colour—sometimes turbid, and mixed with purulent or albuminous flocculi—in others the effused fluid has all the characters of pus—again, it has appeared to be the result of an hæmorrhagic action. The pericardium and heart are ordinarily carpetted (tapissés) with a *false membrane* of various characters. This may exist on one or the other surface, or confined to a spot on either. It is sometimes thin and granular, with an irregular surface, not inappropriately compared to the appearance of a pine-apple—sometimes of an areolar texture of a peculiar character—sometimes resembling the effect which is produced by the separation of two pieces of marble between which some butter has been placed—sometimes not unlike the second stomach of the calf. Filaments, differing in their mode of arrangement, not unfrequently attach the heart to the pericardium. It is probable that these adhesions never occur unless both surfaces be inflamed, and does not the existence of an isolated inflammation of this sort account for those white spots so often observed on the surface of the heart? The most common form of adhesion appears to be where it is general; the firmness of the media of adhesion varies with a variety of causes.

Chronic pericarditis always occupies the whole membrane, which is generally much more red than in the acute form of the disease. The two cases given by Andral afford examples of what is the effect of this character of inflammation. A tubercular deposition, as in analogous cases in other serous membranes may take place in the substances effused by chronic inflammation. There are also several cases related in which ossific deposits were found both beneath the serous membrane and in the substance of the membranous matter effused by chronic inflammation.

IV.

RESEARCHES ON THE PATHOLOGY AND TREATMENT OF SOME OF THE MOST IMPORTANT DISEASES OF WOMEN. By *Robert Lee*, MD. FRS. Physician Accoucheur to the British Lying-in Hospital, and the St. Mary-le-bone Infirmary. 8vo. pp. 220, Highley, London, 1833.

WE have so often expressed ourselves in terms of high commendation of Dr. Lee's professional talents, zeal, and industry, and we have so copiously reviewed in former numbers, the very admirable papers on Uterine Inflammation and on Phlegmasia Dolens, which he has contributed to the Medico-Chirurgical Transactions, that we have little to do at present, but merely to recommend this volume very strongly to the attentive perusal of those of our readers who are not in possession of the Transactions of the Society: the different papers are here collated; and some additions have been made in further illustration of those most important diseases, puerperal fever and phlegmasia dolens, or crural phlebitis, in the language of our author. The second part of the volume contains a reprint of Dr. Lee's interesting communication on the Structure of the Placenta, published in the Philosophical Transactions of last year, and noticed in our October number; and three short chapters on uterine hæmorrhage. No one has of late years deserved

better of the obstetrical profession than Dr. Lee; his researches on the morbid anatomy of that disease, which under the names of puerperal fever, puerperal peritonitis, child-bed fever, epidemic disease of lying-in women, &c. has so long perplexed and bewildered medical men, have done more for the right understanding of the subject than the whole host of the violent and hot-headed publications which at different periods have issued from the press;—there is neither the antiquated bigotry of those who are determined that it is and must be a peculiar essential typhus, requiring wine, bark, and cordials for its treatment; nor yet the furious monomania of some medical reformers, whose eyes can see nothing, and whose heads can understand nothing, save inflammation of the peritoneum and viscera: the riddle is now in a great measure solved; for indeed it was staggering, especially to our young professional brethren, when they were told that equally clever men treated the same malady with brandy and ammonia, on the one hand, and with Sangrado depletion and starvation on the other. The longer we live the more do we see the strong necessity of forming ultimate conclusions in medical science, very, very slowly, and cautiously; of patient and often repeated examination of any subject before we permit our minds even to entertain any theory of its cause; and of a comprehensive analytical and synthetic review of every circumstance, whether it seems to be primary and essential, or merely secondary and collateral. If we were called upon to point out one quality of the mind more important than another, for the medical character, we should say, a freedom and simplicity of seeing things as they really are, and of looking at them with our own, instead of with other people's eyes;—a plain, common-sense, unbiassed inspection of nature, and of its phenomena; and a disregard of all flighty and rapidly-formed hypotheses. It is not bright talent, so much as a strong and vigorous tone of thinking, that is necessary for a physician;—a freedom from all prepossession, and prejudice, and a hardihood of examining for himself;—if zeal and industry be added, he cannot fail to be a useful, and perhaps a distinguished member of our profession. These remarks have been prompted by our memory of the conflicting and utterly discordant statements of different writers on the subject of puerperal fever. Thanks to Dr. Lee, he has in a great measure furnished us with the clue to conduct us through the labyrinth of opinions, and has taught us how to reconcile, at least to a certain extent, assertions apparently distinct, as far as East is from the West. He most satisfactorily proves, that all the destructive febrile affections which follow parturition, are invariably associated with, if not directly caused by, inflammation of some of the textures of the womb, or of its appendages; and that the type or character of the fever is probably dependent upon the particular tissue most involved; thus, that in the inflammatory pyrexia, the peritoneal lining chiefly is inflamed; in the congestive, the muscular substance, and in the low typhoid, the veins of the uterus and ovaria. This is the pith and marrow of Dr. Lee's doctrines; the corner-stone of his ingenious, and we may probably add, secure building. Our readers will do well to look back to our number for Oct. 1831, where they will find the details at full length.*

* Into the literary controversy between Drs. Granville and Lee, we do not mean to enter. They are "Arcades ambo—et respondere parati." This article was written long before the contest began; and, as they are both our personal friends, we must decline the disagreeable office of umpire. The public is the supreme judge, and journalists are, at the best, but special pleaders.—Ed.

The section which treats of uterine phlebitis merits a most careful and studious perusal. The all-comprehensive mind of John Hunter was the first to point out that veins are subject to inflammation and its consequences, and that, very often, most dangerous and fatal symptoms result from these morbid states. Three years after his paper was published, the Italian surgeon Paletta made some very interesting observations in his "Exercitationes Pathologicæ, 1787."

"Grave adeo ac vehemens malum non videbatur in sanguineis pelvis vasis substitisse: sed humorem per venæ cavæ torrentem ad cor delatum, in remotiori aliqua parte depositum fuisse, jure suspicabamur. Quære reserato thorace in dentro pulmone, qui undique liber, colore et consistentia naturali erat, quatuor abscessus offendimus," &c.

. . . "Hæc enim (vasa) sive saniosam materiam ex ipso ulcere exceptam ad interiores partes deportarint, sive quod verosimilius, pus ob tunicarum inflammationem in earum lumine generatum a redeunte sanguine in humorum massam transvectum sit, certe utrovis modo ab extremis partibus ad interiores per hac vasa materia peccans delata est.

. . . . "Si itaque hac transvectio causa est apostematum in memoratis visceribus observatorum: nonne idem sentiendum est de abscessibus, qui post graves capitis lesiones in hepate, liene, pulmone, pericardio consequuntur? Possunt utique sanguineæ venæ ob ictus vehementiam et capitis concussionem, etc. inflammationi ut aliæ partes esse obnoxiæ," &c. 58.

In addition to the researches of Meckel, Dr. John Clarke, and Mr. Wilson, Professor Burns of Glasgow, in his Principles of Midwifery, observes, in the chapter of his work on Inflammation of the Uterus,—

"That pus is often contained in the ovaria and tubes, and sinuses of the uterus. Mortification is an extremely rare termination. This is a fact of which my dissections convince me, and it is further confirmed by the opinion of Dr. Clarke. Little or no serous effusion takes place into the abdomen. In some cases the veins participate very extensively in the disease, and become inflamed to a great distance. Thus, inflammation may spread toward the heart or liver, or down along the veins of one or both thighs. This is attended with great and debilitating fever, and much pain in the course of the affected veins, which after death are found inflamed, thickened, or filled with pus."*

It is to be remembered, however, that Dr. Burns describes puerperal peritonitis and uteritis as diseases essentially distinct from puerperal fever, in which, he says, "that the womb, although sometimes the first seat of the pain, and occasionally found inflamed, is in general not more affected than the intestines." In 1826, M. Louis reported a fatal case of malignant puerperal fever, in which he found, upon dissection, the uterine veins diseased; and M. Dance the same year published the histories of several cases in his Inaugural Dissertation at Paris. It was not however till 1829, that Dr. Lee became acquainted with the labours of his predecessors, and his first memoir on the subject had been previously read to the Medical and Chirurgical Society of London; so that he is fully entitled to share the merit of the discovery, that uterine phlebitis is often associated with many of the worst cases of puerperal fever. It is right here to state, that much praise is due to Mr. Arnott also, for his very valuable paper "on the secondary effects of the inflammation of the veins," which our readers will find copiously reviewed in

* The Principles of Midwifery, by J. Burns. London, 1820, p. 524.

our 23rd No., and to which we, although differing from the author in some very important particulars, awarded high commendation. Dr. Lee himself candidly avows "that, before hearing the observations of Mr. Arnott, I was entirely unacquainted with the true cause of several of the most severe constitutional symptoms of uterine phlebitis." We cannot afford space for further remark, either on this topic or on the sections which treat of the causes and treatment of the disease; one paragraph, however, is too important to be omitted.

"From what has fallen under my own observation in the British Lying-in Hospital, and other similar institutions in this metropolis, where the utmost attention is paid to ventilation and cleanliness, and where the wards are not overcrowded with patients, I cannot hesitate to express my decided conviction, that by no means hitherto discovered, can the frequent and fatal recurrence of the disease be prevented in Lying-in Hospitals, and that the loss of human life thereby occasioned, completely defeats the objects of their benevolent founders." 115.

The next division of Dr. Lee's work is occupied with the investigation of phlegmasia dolens, as it used to be called in the good old times; for soon we suppose the term will be obsolete, and not to be understood, so sweeping threatens to be the besom of reform. Our author prefers the appellation of crural phlebitis to that of "phlegmasia dolens, œdema lacteum, depots laiteux, and the other hypothetical names which have, up to the present time, been employed to designate this disease; because the swelling of the affected limb, and all the other local and constitutional symptoms of the affection, invariably depend on inflammation of the iliac and femoral veins." We do not think that there is wisdom in this change: what hypothesis, in sooth, is associated with the term "phlegmasia dolens," or painful inflammatory swelling? it is a simple predication of certain phenomena which are present in every case; nothing, it seems to us, could be more appropriate and befitting. Our readers are no doubt prepared to expect that we should object to the name of crural phlebitis, and for this very good reason, that we are not yet satisfied that it has been clearly made out that the disease consists in inflammation of the veins alone. We cannot enter at large into a detail of the data and reasoning on which our scepticism is founded, but refer to many of our preceding Numbers, as No. 2, where a review of Dr. David Davis' original paper will be found, and Nos. 18, 22, and 23. The single fact, admitted by Dr. Lee himself, that the veins of the groin and extremity are sometimes violently inflamed, and yet no symptoms of phlegmasia have been present during life, is sufficient to make us pause a little longer, before we christen the disease with a new hypothetical name. Besides, what reasonable man objects to such appellatives as typhus, apoplexia, epilepsia, hysteria, and so forth, because they do not specify the morbid states which, it is supposed, excite the diseases in question?

We shall very briefly enumerate our reasons for not agreeing with the doctrine of the phlebitic origin of true phlegmasia dolens; they are as follows:—Because the inflammation of the veins may be present, without any of the symptoms of the disease; *vide*, among others, a paper by Mr. Wilson, in the Transactions of a Society for the Improvement of Medical and Chirurgical Knowledge, vol. II.;—because genuine phlegmasia dolens is rarely fatal, and genuine phlebitis is one of the most destructive of all diseases—

Dr. W. Hunter, speaking of the former, says "it generally does well;" in 14 cases recorded by Mr. White, of Manchester, not a patient died; in six mentioned by Mr. Frye of Gloucester, in his Essay, 1792, recovery took place; whereas, in 15 cases enumerated by Dr. Lee, eight proved fatal;—3rdly, because we are of opinion that many cases are admitted into the catalogue of phlegmasia dolens, which do not strictly belong to this disease; else how are we to account for the much increased frequency in modern reports? formerly it was a rare disease, but there is no lack of examples of this crural phlebitis now-a-days;—fourthly, because we do not meet with that train of gloomy constitutional symptoms, nor the purulent deposits in the lungs, liver, joints, cellular membrane, &c., which so very generally attend ordinary phlebitis. It is also to be remembered, that pus has seldom been found in any of the inflamed veins of patients who have died of phlegmasia dolens; how different is this from the morbid phenomena of the veins of the arm, when phlebitis supervenes to venesection, or of the spermatic and uterine veins in many cases of puerperal fever, recorded by Dr. Lee in this very volume. Surely, therefore, we cannot regard the pathological state of all these diseases as identically the same;—we do not deny that, in every case of plegmasia, the hypogastric, iliac, and crural veins may be inflamed; for aught that we know to the contrary, this may be true; but we believe that other tissues, as well as the venous, are affected, and that, unless they were, we should not have the phenomena of genuine phlegmasia dolens. Besides the preceding arguments, we may allude to the discoloration of the skin, to the œdema of the cellular texture, to the chain of little abscesses, which are so very commonly attendants on genuine phlebitis, and which do not belong to the old orthodox phlegmasia dolens. We are, therefore still inclined to adopt the opinion of Dr. Hall, that the disease consists of a peculiar inflammation, seated in the muscles, cellular membrane, and inferior surface of the skin, producing a rapid effusion of coagulable lymph; and that the obstructions, or other organic changes, found in the veins or lymphatics are to be considered as secondary effects, and not as a primary causes: and, at the same time, to adhere to what we have put on record in February, 1830—that "Dr. Lee and others have proved that many cases, so closely resembling phlegmasia dolens as hardly to admit of being distinguished from it, are essentially inflammation of the iliac and femoral veins; and they have rendered it probable, that the majority of the instances of that affection are dependent immediately, or remotely, on venous inflammation."

Before leaving this subject, it is proper to state that Dr. Lee is of opinion, that the phlebitis, in phlegmasia, invariably commences in the uterine veins, and is thence propagated along the branches of the hypogastric to the internal, common, and external iliacs, to the femoral vein and its branches. The cases adduced by him render this supposition very probable, but do not quite warrant us in laying it down as of universal occurrence, and we require further data before we can say more. We are to recollect that, in some instances, the pain and swelling begin in the calf of the leg, and mount upwards to the goin. Dr. David Davis is still of opinion that the inflammation commences in the common iliac, and not in the uterine veins, and that the disease is produced by the pressure of the gravid uterus. It does not appear, however, that any examination of the hypogastric veins was made in

Dr. D.'s cases; and the circumstance of crural phlebitis being an occasional consequence of suppressed catamenia and of structural changes of the uterus, adds probability to the correctness of the view taken by Dr. Lee. Four cases are reported in illustration of the former cause, and the same number to shew the effects of cancerous ulceration of the cervix uteri on the uterine and other adjacent veins; a very interesting example of this affection is related by Mr. Lawrence, in the 16th volume of the Medical and Chirurgical Transactions, p. 59. The following appearances were found on dissection.

"The hypogastric vein, involved in the diseased mass, was closed, in consequence of previous inflammation of its coats; and the same change had occurred in the internal iliac, the common iliac, the external iliac, the femoral and profunda veins, as well as in the internal saphena; all of which were completely impervious. The affection terminated above at the junction of the common iliac vein with that of the opposite side; the latter vessel and the inferior cava being quite natural. The saphena was closed for a length of about four or five inches beyond which it was natural. The profunda was cut through near the femoral vein, and the latter was divided as it passes the tendon of the triceps. The disease extended in both these vessels beyond the situations where they had been divided; but its inferior limits were not ascertained. The right spermatic vein was closed in its lower half." 162.

Crural phlebitis, in man, may be induced by disease of the rectum, bladder, prostate, urethra, &c. the inflammation commencing in the veins of these parts, and extending gradually to the iliac and femoral vessels. Mr. Lawrence mentions a case of phlebitis, where it occurred in a patient who laboured under cancer of the rectum; Mr. Holberton reports two—the patients died of diarrhœa and ulcerations of the bowels. Dr. Cheyne "observes, in his report of the Whitworth Hospital, which contains an account of dysentery, that 'it is worthy of remark, that a swelling occurred in several of the patients, both males and females, resembling the phlegmasia dolens in all respects but in its connexion with parturition.'" Drs. Tweedie, Graves, and Stokes relate cases of painful swellings of the lower extremities, closely resembling phlegmasia dolens, after fevers; and M. Cruveilhier mentions that of a man, in whom the symptoms came on after the introduction of a sound into the bladder for retention of urine, occasioned by an enlarged prostate.

One of the most common causes is the application of cold to the limb. In the case of the late Earl of Liverpool, recorded by Sir H. Halford, the attack was induced by exposure to a current of cold air, which passed through an open window upon the lower extremities, when but thinly clothed, while his Lordship was attending a crowded levee. We shall transcribe the following very interesting case, communicated by Drs. Graves and Stokes.

"A young man of a strong habit was employed for two successive days in working a ditch, and was consequently obliged to stand in water above his knees during that time. On the following day he became affected with lassitude, vertigo, and general weakness, and complained of severe pain in the right thigh. These symptoms continued for seven days, when he was admitted into the Meath Hospital. His countenance was anxious and depressed. The tongue furred, thirst, headache, urine scanty, turbid, and high-coloured. Pulse 96. Skin mottled with petechiæ. In addition to these general symptoms, the respiration was laboured and unequal, with some cough; face very livid. But his

chief complaint was a severe pain in the upper and anterior part of the right thigh, which was greatly aggravated by motion or pressure. He had also severe pain in the left hypochondrium.

At this time no swelling of the limb whatever could be detected, but in the course of two days the upper portion of the thigh became evidently swollen, the part being extremely tender, but not at all red. The pain of the side continued, and extensive bronchial and pneumonic inflammation was detected. General bleeding and very free leeching to the limb was employed. The blood was not inflammatory, and no relief was experienced by the patient. The swelling of the thigh increased, calomel and opium were freely exhibited, but without any effect. The typhoid symptoms increased, and the patient died on the fourth day after his admission.

On dissection the right lower extremity was found to be tense and swollen in its superior portion, while the leg and foot were slightly anasarcous. The sac of the pericardium contained some sero-purulent fluid, and that portion covering the auricles and great vessels was vascular, and in many places covered with coagulable lymph. Both lungs were in a state of extreme sanguineous congestion, with commencing solidity in their posterior inferior portion, and general inflammation of the pleura. The bronchial mucous membrane was universally red, and the tubes filled with frothy mucus.

The vena cava contained a few portions of a substance of a granular appearance, friable, and of a yellowish colour. This did not adhere to the vessel, which otherwise appeared healthy. In the external iliac vein, however, just above Poupart's ligament, a large concretion of a similar nature, nearly plugging up the vessel, and extending into some of the minute collateral branches. The lining membrane red, and in one point adhered to the coagulum. No puriform matter could be detected. The femoral and popliteal arteries were healthy. The cellular tissue of the limb was œdematous." 168.

Similar swellings are also occasionally brought on by the irritation of varicose ulcers on the limbs; and their occurrence is by no means unfrequent in the upper extremities of women afflicted with cancerous mammæ. Laennec has made the important observation.

"It is not uncommon to find the veins in the neighbourhood of a cancerous breast filled with pus, either pure or mixed with blood, sometimes fluid, at other times of the degree of consistence of an atheromatous tumour.

An additional consequence of the presence of too much pus in the blood, is the production of inflammation in different organs, and especially the lungs, which runs rapidly into suppuration. It is from this circumstance, that the subjects of surgical operations, and those labouring under extensive suppurations, are frequently cut off by peripneumonies, which, according to the observations of M. Cruveilhier, are usually lobular, that is, commencing in several points at once. This, in my opinion, is the mode in which we must explain the occurrence of metastasis of pus, at least, in the majority of cases."* 72.

With this we close our review of the first part of Dr. Lee's researches. Part II. professes to treat of uterine hæmorrhage; but the greater portion of it is occupied with a reprint of his very valuable paper on the structure of the placenta. The facts there stated appear to warrant the conclusions —that the placenta does not consist (as all anatomists have hitherto described) of two parts, the maternal and the fœtal;—that no cells exist in its substance;—that there is no communication between the uterus and the

* Laennec on Diseases of the Chest, by Forbes, 1827, p. 652.

placenta by large arteries and veins;—and that therefore whatever changes take place in the fœtal blood must result from the indirect exposure of this fluid, as it circulates through the placenta, to the maternal blood flowing in the great uterine sinuses; seeing that the deciduous membrane is interposed between the one set of vessels and the other. Professor Burns, of Glasgow, has published a paper, last July, in the Medical Gazette, in which he advocates the old doctrine of a direct communication of the large uterine and placental vessels, and of the cellular texture of the placenta; but we do not think that he has been successful in refuting the interesting discoveries of Dr. Lee. As this is a subject of great interest to the anatomist and physiologist we are tempted to find room for the valuable communications of Mr. Owen, of the College of Surgeons, whose authority must weigh highly in all anatomical researches, and of Mr. Charles Millard, the Demonstrator of Anatomy in the School of Webb Street.

"My Dear Sir—During the time you were examining the Hunterian preparation of the uterus and placenta in the Museum of the Royal College of Surgeons, your observations on the obscurity produced by the extravasated injection led me to think of some less objectionable mode of demonstrating the vascular communication between the uterus and placenta, if it existed; or of proving more satisfactorily than the appearances you pointed out in that preparation seemed to do, that there was no such communication.

You have since afforded me the means, through the kindness of Mr. Alex. Shaw, of examining, in the manner I wished, the anatomical relations between the placenta and uterus. This has been done by dissecting the parts under water before disturbing them, either by forcibly throwing foreign matter into the vessels, or by separating the placenta from the uterus, to observe the appearances presented by the opposed surfaces,—a proceeding which, if done in the air is liable to the objection of the possibility of having torn the vessels which were passing across, and the coats of which are acknowledged by those who maintain the existence of such vessels, to be extremely delicate.

The mode, therefore, which was adopted to avoid these objections, was to fix under water, in an apparatus used for dissecting mollusca, &c. a section of the uterus and placenta, and, commencing the dissection from the outside, to remove successively and with care the layers of fibres, and trace the veins as they pass deeper and deeper in the substance of the uterus in their course to the deciduous membrane; in which situation, as the thinnest pellicle of membrane is rendered distinct by being supported in the ambient fluid, I naturally hoped in this way to see the coats of the veins continued into the deciduous membrane and placenta, and to be able to preserve the appearance in a preparation, if it actually existed in nature. But in every instance, the vein, having reached the inner surface of the uterus, terminated in an open mouth on that aspect; the peripheral portion of the coat of the vein, or that next the uterus, ending in a well-defined and smooth semicircular margin, the central part adhering to, and being apparently continuous with, the decidua.

In the course of this dissection, I observed that where the veins of different planes communicated with each other, the central portion of the parietes of the superficial vein invariably projected in a semilunar form into the deeper-seated one; and where (as was frequently the case, and especially at the point of termination on the inner surface) two or even three veins communicated with a deeper-seated one at the same point, these semilunar edges decussated each other, so as to allow only a very small part of the deep-seated vein to be seen. I need not observe to you how admirably this structure is adapted to ensure the effect of arresting the current of blood through these passages, upon the contraction of the fibres with which they are every where surrounded.

On another portion of the same uterus and placenta, (which were removed from a woman who died at about the fifth month of utero-gestation,) I commenced the examination under water by turning the placenta and deciduous membrane from the inner surface of the uterus. In this way, the small tortuous arteries that enter the deciduous membrane were readily distinguishable, though not filled with injected matter; and as it was an object to avoid unnecessary force in the process of separation, they were cut through, though they are easily torn from the decidua. But with respect to the veins, they invariably presented the same appearances as were noticed in the first dissection, terminating in open semi-circular orifices, which are closed by the apposition of the deciduous membrane and placenta. This membrane is, however, certainly thinner opposite these orifices than elsewhere; and in some places appeared to be wanting, or, adhering to the vein, was torn up with it; but in these cases the minute vessels of the placenta only appeared, and never any indication of a vascular trunk or cell commensurate with the size of the vein whose terminal aperture had been lifted up from the part.

The preparation which accompanies this letter shows the termination of a vein on the inner surface of the uterus, and an artery of the decidua cut through, with the corresponding appearances on the surface of the placenta; also the valvular mode in which the veins communicate together in the substance of the uterus.

I remain yours, very truly, RICHARD OWEN." 197.

Mr. Millard states—

"The parts were examined without any previous injection or other preparation, that every thing might be seen in its natural state. On making an incision through the anterior wall of the uterus, the attention was immediately arrested by the large size of the uterine veins, especially of those in the neighbourhood of the placenta. The right side of the anterior wall of the uterus was then carefully turned back, and with such ease as to convince me that no large vessels were torn through; the tunica decidua was now distinctly seen passing behind the placenta, and it was also observed to pass over the orifice of the fallopian tube. The other side of the uterus was then carefully examined under water, principally with a view to determine the direction and termination of the uterine veins, and the connexion that exists between the uterus and placenta. This examination completely coincides with your description. The uterine veins passed in an oblique direction, as regards the placenta, and not immediately towards it, and in no instance could they be traced into its structure, for whether they were followed from the external to the internal surface of the uterus, or in the opposite direction, they were found to present a number of large valvular openings, some of an elliptical and some of a semicircular form, situated in the sides of the veins, and having no corresponding openings on the outer surface of the placenta, but closed by the deciduous membrane. All these openings had distinct, well-defined edges, formed, apparently, by a duplicature of the lining membrane of the uterus, and quite unlike ruptured vessels; indeed, as I have before stated, none of these veins could be followed into the placenta, even by the most careful examination. But both arteries and veins, not larger than a bristle, were readily traced from the surface of the uterus to the tunica decidua covering the uterine surface of the placenta, where they ramified very minutely. Some of these were distended by inflating the large uterine veins, but no air could be made to pass from these vessels into the substance of the placenta, although the inner membrane was distinctly raised by it. The uterus was farther connected to the placenta by a quantity of pulpy cellular membrane, which easily broke down under the finger." 202.

In uterine hæmorrhage, when the placenta is situated over the os uteri, Dr. L. makes the important remark, that the flooding is always increased

by the labour-pains, and generally also during the examination with the finger; whereas the reverse of this takes place in other hæmorrhages, which are invariably more or less abated during each contraction of the uterus. In one case the placenta was expelled first, the child following;—the woman nearly perished. Several other cases are adduced in our review of Dr. Ramsbotham's Midwifery. When the flooding comes on after the separation and removal of the placenta, our chief reliance, in the opinion of the author, ought to be in powerful pressure on the hypogastrium, and in the external application of napkins plunged into cold water, and suddenly dashed on the abdomen; ice introduced into the vagina and applied in a bladder to the pubis, is also recommended. The practice of introducing the hand into the uterus, to stimulate it to contraction, "is not only often ineffectual for this purpose in the worst cases of flooding, but that it often gives rise to subsequent fatal inflammation of the deep-seated structures of the uterus. I have repeatedly passed the hand into the uterus to produce contraction, but it has refused to obey the stimulus of the hand; it has remained like a soft flaccid bag—more like a piece of intestine than uterus, and the blood has continued to pour down the arm, until the hand has been withdrawn and more efficient remedies employed." 216.

The testimony of Dr. Dewees is brought forward in confirmation; he says, "that he can with most perfect truth declare that he has not found it necessary to introduce the hand for the purpose of stopping an hæmorrhage after the expulsion of the placenta, for more than the last five-and-thirty years, and that he regards the practice as always frightful, and oftentimes unnecessary and pernicious." 216.

Our experience is however strongly in favour of the practice, and the high authority of Professor Burns may be adduced. "The hand is to be immediately introduced into the womb, and must be kept there, moving it gently, until the fibres contract; and until this takes place, neither the hand nor the placenta should be withdrawn," p. 396; and again, speaking of hæmorrhage after the expulsion of the placenta—"the only security consists in uterine contraction; this is to be excited by the application of cold, and by the introduction of the hand; not simply to extract the coagula, but to stimulate the uterus, and rather make it expel them." P. 401. With regard to the ergot of rye in such cases, Dr. Lee is quite sceptical of its good effects, whether the placenta has been expelled or not: and his stricture on the proposal of Plouquet, to interrupt the circulation through the abdominal aorta, is severe, but just.

"Whoever it was who first recommended the introduction of the hand into the uterus to compress the aorta, he must have been alike ignorant of the structure of the gravid uterus, and of the process employed by nature to suppress uterine hemorrhage. The hand, if applied to compress the aorta through the uterus, would be placed over it, below the origin of the spermatic arteries, which supply that part of the uterus where the placenta usually adheres. Pressure over the lower part of the aorta might prevent the flow of blood into the iliac arteries, but it could not fail to increase the hemorrhage, by forcing the blood still more strongly into the vessels from which it was flowing in the upper part of the uterus." 217.

In taking leave of Dr. Lee's work, we feel it to be alike our pleasure and duty once more to record our opinion of its high and sterling merits;—it ought to have a place on the shelves of every physician in the kingdom.

V.

LEÇONS ORALES DE CLINIQUE CHIRURGICALE, FAITES A L'HÔTEL DIEU DE PARIS. Par *M. le Baron Dupuytren*, Chirurgien en Chef. Recueillies et publiées par une Societé de Médecins. Tom. 1 et 2. A Paris, 1832. (Clinical Lectures on Surgery, delivered at the Hotel Dieu, in Paris, by Baron Dupuytren.)

[Continued from page 321 of Vol. XVIII.]

ART. XV. ON LUXATION OF THE VERTEBRÆ, AND ON DISEASES WHICH ARE LIABLE TO BE MISTAKEN FOR IT.

CASE 1.—*Laceration of the Ligaments of the Bodies of the Vertebræ without displacement.* A man, æt. 50, was standing firmly at the tail of a cart, with his head and neck bent forward, whilst a side of beef was being placed on his back, when the burden, slipping from the hands of the man who held it, fell with force on the neck of the butcher, and threw him on the ground. He was brought into the Hôtel Dieu. There was a large ecchymosis without any tumour at the posterior and inferior part of his neck, which was painful when touched or moved. At the same point a distinct crepitation was heard when the head of the patient was raised or turned. There was loss of motion and feeling in the arms and legs, in the walls of the thorax and abdomen, with paralysis of the bladder, and retention of urine. The muscles of the diaphragm, face, and neck, were alone capable of contraction; respiration was difficult. He remained two or three days in this state; respiration then became more embarrassed, and he died from suffocation. On examination a large ecchymosis was found around the last cervical vertebræ. The intervertebral substance uniting the fifth and sixth was completely destroyed, but the bodies of these vertebræ were uninjured. The spinous, transverse, and articular processes of the fifth, sixth, and seventh cervical vertebræ were broken, so that the two portions of the spinal column could be readily displaced. The medulla spinalis at the part appeared rather more voluminous but otherwise healthy; however, on making a longitudinal section, the centre was found to be almost putrid and mixed with decomposed blood.

CASE 2.—*Laceration of the Ligaments of the Bodies of the Vertebræ, with Displacement.* A labourer, between 40 and 45 years of age, employed at the quarries, whilst his body was bent forwards, received a mass of earth on his loins, the weight of which, after some efforts on his part to overcome it, threw him on the ground. He was taken home, where he remained three days with complete loss of sensation and motion in the inferior parts of his body. On the fourth day he was brought into the Hôtel Dieu. At the upper part of the loins was a large tumour, hard in the centre, and soft in the circumference, where evident crepitation was felt. Another tumour was felt through the abdomen in the track of the spine. The length of the ab-

domen was much diminished, and the base of the chest almost touched the cristæ of the iliac bones. There was complete loss of sensatiou and motion in the lower limbs, and abdominal parietes. Urine flowed involuntarily from the distended and paralysed bladder. Costiveness; belly distended, but soft; pulse small and contracted; respiration short and difficult. Dull pain in the lumbar region; intellectual faculties unaffected. The tumours, crepitation, diminution in the space between the chest and pelvis, and the paralysis, clearly indicated a solution of continuity of the spinal column with displacement. The paralysis gradually increased, and on the seventh day the patient died asphyxiated. On examination it was found that the transverse and articular processes of the last dorsal vertebra, and of the two first lumbar, were broken. The body of the last dorsal vertebra, and that of the first lumbar, separated from their articulations, and from the body of the second lumbar vertebra, had passed before this latter bone, projecting above an inch. The spinal marrow was lacerated, and the pillars of the diaphragm torn. On carefully examining the displaced vertebræ it was found that their intervertebral substance had been lacerated, and that a thin layer of bone had been also torn from one corner of the lumbar vertebra.

Case 3. A tall and large woman, 56 years old, in descending a staircase at night, fell backwards, and struck violently against the edge of a step the posterior and inferior part of her neck. On raising her it was found that nearly every part beneath her neck was deprived of sense and motion. In the morning she was brought to the Hôtel Dieu, suffering acute pain at the lower part of the neck, increased by the slightest touch or motion. The head and neck were inclined forwards, and a little to the right, the posterior part of the neck was depressed, and the superior part of the dorsal region elevated. Complete paralysis beneath the diaphragm, partial paralysis of the arms, respiration frequent and laborious, voice and intellectual functions natural. From these symptoms it was evident that there was solution of continuity of the spine, with displacement. The following night the respiration became more difficult, and she died.

Examination of the Body. The cellular tissue and muscles adjacent to the injury were bathed in blood. The parts immediately in contact with the vertebral column were destroyed, so as to expose the superior articular processes of the seventh cervical vertebra, whilst the sixth was driven half an inch before the seventh. In the interval between these two bones the medulla spinalis was seen stretched from behind forwards, and from above downwards, flattened, and compressed on the body of the seventh cervical vertebra. On examining the spine anteriorly, an eminence surrounded by blood was evident, consisting of the whole of the thickness of the body of the sixth cervical vertebra. The anterior ligaments of the spine were destroyed, and the pharynx torn. On detaching the cervical portion it was found that the ligamenta subflava, the anterior and posterior vertebral ligament, as well as the intervertebral substance uniting the sixth and seventh vertebræ, were torn; that the seventh cervical vertebra was entire in all its parts; that the apex of the spinous process, as well as the borders of the inferior articular processes, were slightly bruised. The articulations of the vertebræ above the luxation were natural; that between the seventh cervical and the first dorsal was much more moveable than natural.

The first of these cases is an example of laceration of all the ligaments of the vertebra, and fracture of their articulating processes without displacement of the bones; in the second, these same injuries are attended with displacement; the third is a pure and simple luxation without any previous fracture. In all three cases the spine has been in a state of tension, and the force has been applied behind. In all three cases has the intervertebral substance been torn; in all, the injury of the medulla spinalis was the cause of the dangerous nature of the injury, and of the immediate paralysis. In the three cases, the paralysis has been gradually propagated from below upwards, until, the origin of the diaphragmatic nerves having been implicated, the patient has died from interruption of the various phenomena of respiration. From some of the observations of M. Dupuytren, it appears that the possibility of luxation of the vertebræ, under any circumstances, is doubted by many French surgeons. In this country some are still inclined to doubt the possibility of luxation without fracture, and to such this case of the Baron's, in which he confesses that the summit of the spinous processes and the articular processes were "légèrement entramés," would not be allowed to be a decisive proof to the contrary. However, more than one instance of luxation of the cervical vertebræ without fracture are recorded by our own countrymen, and it is a point which can be decided by one well-authenticated case as well as by a thousand, and in a practical point of view is of little value. Its extreme rarity all must admit. The diagnosis of these injuries is explained by cases.

CASE 1.—*Rheumatism simulating Luxation of the Cervical Vertebræ.* A boy, aged 15, was brought to M. Dupuytren by several practitioners, who believed that he had dislocated his neck. Two days previously, in endeavouring to take off his shirt, he made a violent movement, and at the same time felt acute pain in the cervical region, and heard a crack, his head remained firmly bent towards the left side. The surgeons who were called in, pronounced it an incomplete luxation of the first vertebra on the second, but as the case appeared to them obscure and dangerous, they requested M. Dupuytren's opinion. On examination he found the head strongly bent to the left side, and the spinous processes of the first vertebra projecting; the neck was rounded at the opposite side; he felt great pain at the part, which was increased on the slightest effort made to rectify the displacement of the head. There was numbness and pricking pains in the right shoulder and arm; the patient swallowed with difficulty, and was unable to turn or bend his head. M. Dupuytren immediately decided that there was no luxation, but that the affection was rheumatic. He had often seen in persons subject to rheumatism, the occurrence of acute pain in the neck after some effort, owing to the erratic rheumatism becoming fixed. Thus persons whilst dancing are suddenly seized with acute pain in the calf, which hinders them from walking for two or three days, and which does not at all depend on rupture of the tendon of the plantaris; others, in mounting into a cabriolet, feel suddenly so acute a pain in the common mass of the sacro-lumbales and longissimi dorsi muscles, that they step back alarmed, believing they have been struck or wounded. Such pains, when they cease in one part, not uncommonly attack another. M. Dupuytren was inclined to attribute this cause to the accident, as the patient was employed in a wine-shop, and was

obliged frequently to descend into the cellar and to remain there a considerable time daily; he had also had rheumatic pains. Blood to be taken by cupping from the left side of his neck. In the morning the correctness of the diagnosis was proved by the amelioration of the symptoms. Emollient fomentations, &c. were employed, and in a fortnight the patient left the hospital, having lost every trace of the affection.

Case 2.—*Distention and Swelling of the Cervical Intervertebral Ligaments.* A man was admitted into the Hôtel Dieu on account of pain, &c. in the cervical region. Some months previously he had fallen down, and subsequently he stated that he had been struck across the neck and head with a gun. There was change in the form of the neck—it was concave anteriorly, convex posteriorly, with projection of the upper cervical vertebræ. He was unable to rotate his head; and when he wished to turn himself, in order to look or walk, the head appeared soldered to the trunk. The disease was aggravated by work, and swelling of the cervical ligaments had supervened. Cupping, and the subsequent application of two moxas, produced much relief. The pain subsided, and he could move his head with ease.

The following case will be perused with interest, as it not only illustrates the functions of the nerves of the tongue, but tends to prove the truth of Sir C. Bell's discoveries.

A man, aged 30, was admitted last year into M. Dupuytren's wards. He had been a weaver, a trade which subjects those who follow it to rheumatic affections, as they work either in cellars, or in damp and cold ground-floors. Three years previously, he was seized with acute pains in the left side and back part of the head; these pains prevented all motion of the part, and deprived him of rest. In five or six days, the pain shifted to the upper part of the left side of the neck. The lateral flexion of the head, as well as the motions backwards and forwards, were partially executed by the whole cervical column, but not by the two first vertebræ. These symptoms were followed by slight difficulty in speaking; this increased, so that, at the end of two months, the patient could not make himself understood. He said that, in whistling, the air passed by the left side of his tongue, and that when he wished to say *je*, he pronounced *ze*. There was pain in the angle of the left lower jaw, but no paralysis of its muscles. The left side of the tongue then began to diminish in size, and the anterior and middle part became so completely atrophied, that it felt like an empty leather purse. The mucous membrane was entire, but the muscles beneath it had disappeared. The right side was well nourished, and appeared to have gained an increase in strength. For some months, at first, the patient could not articulate, but when examined, he could enunciate clearly and distinctly. He regained his speech by practice with the maimed organ, rather than by any diminution of the disease. M. Dupuytren ascertained, by experiment, that the patient had not lost the sensation of taste in the atrophied half of the tongue. The atrophied parts are, therefore, the muscles, and the consideration of the distribution of the nerves of the tongue to these muscles led M. Dupuytren to form his diagnosis. The tongue is more abundantly supplied with nerves than any part of the same size; they are the hypoglossal, glosso-pharyngeal and lingual branch of the fifth pair. The lingual branch of the fifth is

distributed to the papillæ on the upper surface of the tongue; if this had been affected, the taste would have suffered, the glosso-pharyngeal supplies the posterior part of the tongue and the lateral parts of the pharynx, and the freedom of these from disease proves that the nerve that supplied them was not implicated. The great hypoglossal nerve, or ninth pair, which arises between the corpora olivaria and pyramidalia of the medulla oblongata, escapes from the cranium through the anterior condyloid foramen. It furnishes branches to the muscles inserted in the os hyoides, and to the middle cervical plexus, and terminates in the muscles of the tongue, of which it is the motor nerve. M. Dupuytren considered that this was the nerve affected. The freedom from any disturbance in the intellectual faculties, as well as in the organs of motion, proved that the disease of this nerve was not within the cranium, but after its exit from that cavity. This opinion is strengthened by the disease of the occipito-vertebral articulation. The impossibility of executing the motions of the head seemed to indicate an affection of the ligaments uniting the vertebræ, probably arising from rheumatism; the situation of the pain in the first instance shewed that the disease existed between the atlas and the occipital bone, perhaps also between the atlas and dentata. The left side of the neck, which, at its upper part, is supplied by the ninth pair of nerves, was slightly atrophied. As the hypoglossal nerve passes through a foramen, in front of the occipital condyle, it was probably either compressed or disorganized by the inflammatory engorgement of the ligaments uniting the atlas with the os occipitis. The treatment adopted was energetic, as there were symptoms threatening an extension of the disease to the right side. Blood was repeatedly drawn by cupping from behind the mastoid processes, and moxas were subsequently applied. These remedies were successful.

Anchylosis of the atlas and os occipitis are not uncommon; there are 10 or 12 preparations of this affection in the Museum of Comparative Anatomy; but M. Dupuytren has never seen another case of paralysis and atrophy of one-half of the tongue.

XVI. ON BURNS.

To this subject M. Dupuytren has devoted particular attention, and he has frequently been in the habit of giving a series of clinical lectures upon it. The division of these injuries most commonly adopted is founded on the symptoms, thus three degrees are generally acknowledged; first, simple inflammation ending in resolution; second, in suppuration; and the third, complete destruction of the vitality of the part. M. Dupuytren's divisions depend on the tissues that are implicated. They are six. 1. Erythema, or simple phlogosis of the skin without vesications. 2. Cutaneous inflammation, with separation of the epidermis by vesication. 3. Destruction of the rete mucosum, and papillary surface of the dermis. 4. Disorganization of the whole dermis as deep as the subcutaneous cellular tissue. 5. Eschars of the superficial parts, and of the muscles wholly or partially. 6. Carbonization of the whole thickness of the burned part.

1. This is usually produced by radiant heat, hot vapours, &c. The erysipelatous redness is attended with smarting pain, these symptoms disappear in a few days, and the cuticle desquamates. If a large surface is impli-

cated, symptoms of gastro-intestinal irritation supervene. If the skin of the head is burned, the irritation may be propagated to the brain.

2. This is the effect of a more energetic cause, of longer continuance. The pain is sharp and burning, and at the same time, or most frequently some hours afterwards, vesications appear; if these, after a few days, are broken, the rete mucosum, covered with a new epidermis, still thin and reddish, is seen. In some cases the epidermis is at once destroyed; this is followed by intense pain and slight suppuration.

3. This is marked by grey, yellow, or brown spots, insensible if slightly touched, but painful if pressed. The vesications covering them are filled generally with a brownish, milky serosity, or bloody serum, and this is at first a useful diagnostic mark. The detachment of the eschar leaves superficial ulcerations, the cicatrices of which remain almost always conspicuous, owing to the white, dense, and shining layer which replaces the part destroyed. When the inflammation necessary to the detachment of the eschar commences, the pain, which after the first 24 hours was trifling, returns violently. It should be remembered, that the pain produced by burns is much greater when the surface of the skin only is burned, than when it is deeply destroyed.

4. If an ignited body has remained some considerable time on the part, it causes acute pain which ceases on the cause being removed. The epidermis, rete mucosum, the whole thickness of the dermis, and sometimes a slight layer of subcutaneous cellular tissue are deprived of life, and reduced to a deep, yellowish, or blackish, dry, insensible eschar. The healthy skin around it is puckered and shrivelled by the heat. In three or four days the pain commences, an inflammatory circle forms around the eschar, which in 15 or 20 days is separated; the bottom of the wound is formed by subcutaneous cellular tissue, which supplies a very abundant suppuration, and vigorous granulations. The force with which the circumference of ulcerations from burns is drawn towards the centre is a phenomenon almost peculiar to these injuries; it is not observed in any other wounds with loss of substance in any comparable degree; hence deformities are so common a result. These results never take place on the posterior part of the trunk, as the natural flexion of the body opposes the contraction of the cicatrix; the same observation applies to the limbs.

5. In this degree the eschars comprehend aponeurosis, muscles, and tendons. The consequent suppuration is much more abundant than in the other cases, and the cicatrix, as the motor organs themselves are implicated, is imperfect, adherent, and productive of irremediable injury to the motion of the part.

6. The surface of the limb is carbonized, hard, insensible, sonorous on percussion, and easily broken if it is attempted to be bent; the eschar, when detached, leaves an irregular stump. MM. Roche and Sanson have published a case of a young man who, stepping into the trench in a foundry through which a stream of melted iron was running, was overtaken by the red hot fluid, and who drew out the limb with the loss of his foot and the lower part of the leg. He hardly felt pain, and did not perceive at first the horrible mutilation.

Such is M. Dupuytren's division, which differs from the other in its more accurate distinction of the injuries to the skin, &c. which had been compre-

bended by authors under their last head. But it must not be imagined that cases will often occur answering solely to either of these degrees. In extensive burns every degree may be recognized on different regions of the body. In many cases these divisions are not easily recognized immediately after the accident. The action of the fire which has disorganized the more superficial parts, often has so much injured those immediately subjacent, that they cannot withstand the inflammatory action, and consequently lose their vitality. Thus eschars, when detached, expose a greater loss of substance than was at first imagined; this is important in a medico-legal point of view, as in burns of the third and following degrees no opinion should be given until the eschars begin to separate. Constitutional symptoms are either the immediate results of general irritation produced by the action of caloric, or the consequences of subsequent inflammation. The pain produced by the action of a concentrated heat on the animal solids may be so intense as to cause immediate death. M. Dupuytren has seen several of these cases of "death by excess of pain," and he believes that an excessive loss of sensibility may kill, as well as an excessive loss of blood in hæmorrhages. Children and nervous women are most subject to such a termination, adults rarely, and old people never. There are symptoms of violent irritation of the cerebral system, and of congestion of almost all the organs of the great cavities. In other cases, where the irritation is not sufficiently intense to be immediately fatal, there are frequently, excessive agitation, loss of sleep, spasms, convulsions, fever, or the patients fall into a state of collapse, which usually terminates fatally in a short time; in a few cases there is a general re-action.

In superficial burns of some little extent there is a constitutional re-action similar to that in erysipelas, which readily yields to medical treatment. Irritable patients are particularly subject to it. In many burns of the third and fourth degrees there are no unfavourable symptoms until about the fourth day, when inflammation commences. Symptoms of nervous and gastric irritation then set in with greater severity than in the more superficial injury, and sometimes terminate fatally. There is often great oppression and difficulty in breathing, owing to the severe shock which the organs of respiration and of articulation have undergone, and to a secondary bronchial irritation, or pulmonary congestion. Excessive and protracted suppuration gradually exhausts the strength, produces emaciation, and incurable marasmus. One of the most severe and dangerous complications is phlegmonous erysipelas; even when its progress is arrested, the disorganization it has effected is so excessive, that amputation affords the sole, but doubtful prospect of success. Thus the constitutional effects of burns may produce a fatal issue in four ways; 1st, by irritation; 2dly, inflammation; 3dly, suppuration; 4thly, exhaustion. In the examination of the bodies of those who have perished in a general conflagration, either in the midst of the flames, or in a few minutes after having been dragged out of them, there are marks of considerable congestion of the digestive canal. The mucous membrane not only presents bright red patches of various sizes, but is injected with blood, and contains some of this fluid in its cavity which has escaped by exhalation. The brain is strongly injected, there is a reddish serum in the ventricles, as well as in the cavities of the pleura, pericardium, and peritoneum. The bronchial tubes contain a bloody mucosity, their mucous

membrane is in many points of a bright red, or covered with injected capillaries. It appears as if the blood, driven from the surface by a sudden and general irritation, had endeavoured, under the influence of the excessive stimulus of the heart and vascular system, to traverse the free pores of the internal surfaces. If life is prolonged two or three days, and death takes place from inflammatory re-action, preceded by symptoms of acute visceral irritation, all the usual effects of acute gastro-enteritis are observed, accompanied usually by inflammatory appearances of the brain and of the lungs. The effects of inflammation of the lungs, unsuspected during life, such as Stoll has described as latent, are often discovered. If life has been protracted until the patient has been worn out with suppuration and exhaustion, the viscera, and particularly the digestive canal, presents all the appearances produced by long-continued inflammation. The mucous membrane is covered with red patches, or in a state of ulceration, &c.

Prognosis. Extensive burns of the first degree may produce death immediately, or in a few hours after the injury; but when 24 or 48 hours have elapsed, resolution commences, and the danger is passed. When the burning body is very hot, and its application rapid, it may produce a kind of tumefaction of the epidermis; if the surface thus affected is very large there is great danger. This accident sometimes is produced by a bath which is too hot. In burns of the second degree the same effects may be produced, but besides these, there is more danger of inflammation of the internal organs, and the patient is not in safety from such an attack until desiccation has commenced. It should be borne in mind, that in all cases women, children, and irritable, nervous patients, are less able to bear the pain consequent on burns, than adults and old people. In burns of the third degree, there is not only a liability to all the effects of the first two, but to those which may arise from the establishment of the inflammation necessary to detach the eschars. If a considerable surface is affected, such as two or three feet square, death generally takes place when the secondary inflammation or suppuration are established. In burns of the fourth and following degrees the irritation and pain usually remain no longer than the actual cause, but the sufferers may perish during this period. If they survive it, in some instances they are plunged into a state of stupor, they are icy cold, and die in a few hours; or they rally, and are cut off from the fifth to the ninth day by inflammatory re-action, or finally the profuse suppuration, the length of the disease, hospital gangrene, or a low fever produce fatal exhaustion.

Treatment. In burns of the first or of the second degree, which are not attended with destruction of the epidermis, the indications are, to prevent inflammation, vesication, and the formation of eschars. Slightly astringent and sedative applications, which do not stimulate, fulfil this indication. Such are, long-continued immersion of the part in cold water, or in goulard water, or in water slightly accidulated, or mixed with a little alcohol; when immersion is impracticable, long-continued and frequently-renewed fomentations with the same liquids, or with ether, alcohol, a solution of sulphate of iron, alum, or ammonia. These latter substances cannot be employed except the epidermis be uninjured, for if it be removed they augment the

irritation and produce acute pain. It is therefore important to preserve the epidermis, and for this purpose great care must be taken in removing the clothes. If vesications are formed they must be opened with a needle at their most depending part. Sedatives or topical anodynes, if the pain is considerable. Local or general bleeding if the subject is young, vigorous, and sanguineous. Diet restricted in proportion to the severity of the injury. If, notwithstanding these precautions, inflammation commences, it must be attempted to be moderated by emollient fomentations and cataplasms, local and general bleedings. In burns of the third or fourth degrees, the same treatment is indicated when the secondary inflammation commences. This should be restrained, if too violent, and excited under opposite circumstances; but it should be recollected, that too energetic or long-continued stimulants may produce erysipelas, which is sometimes fatal. M. Dupuytren, in such cases, applies a temporary blister to the erysipelatous surface, which almost always puts a stop to the inflammation. At this period the burn should be covered with fine linen, having numerous small holes cut in it, and smeared with simple cerate or saturnine ointment; above this should be placed a slight layer of charpie, in order to absorb the pus. Emollient cataplasms should be applied to the sloughs to detach them, and when they are almost entirely loosened, the few filaments which confine them to the bottom of the wound should be cut with scissors. Where the slough is deep, and a feeling of fluctuation indicates the presence of pus, an incision should be made through the slough to give the fluid exit, and to prevent its infiltration into the surrounding cellular tissue. When, after the separation of very superficial eschars, or of the epidermis after vesications, the exposed dermis is very painful, an opiate cerate should be applied, or the dressings should be moistened with a weak solution of the gummy extract of opium. In dressing a burn, it should be exposed as short a time as possible to the air, to prevent pain; a many-tailed bandage is, therefore, preferable, when it can be applied, as, by that means, a part of the wound only need be exposed at a time. After extensive burns of the third or fourth degree, suppuration is generally very abundant, so that it becomes necessary to renew the dressings two or three times daily. Substantial food and tonics, such as quinine, given by the mouth, in lavements, and applied topically, are necessary. The deformities resulting from malformed cicatrices may almost always be prevented, by carefully cauterizing the too prominent granulations, by position, by well-applied dressings, and the use of firm splints.

When a limb, or part of a limb, is completely destroyed, amputation is indispensable; it substitutes a simple wound, which will readily cicatrize, for an irregular solution of continuity, with projection of the bone, as well as the secondary inflammation. The age, constitution, and strength of the patient must of course be taken into account.

We have entered thus fully into M. Dupuytren's observations, not from a conviction of the utility, in general, of minute divisions, nor of any novelty in his treatment, but from a persuasion that a promulgation of such views, founded on pathological principles, is the best method of removing the false idea which is attached, even by many of the profession, to the word burn. How is it that every age has had its specific—that each has fallen in its turn into disrepute, and yet that infallible remedies still continue to be discovered? Is it not owing to the simple idea which is attached to the word—*burn*?

Now it is M. Dupuytren's object, by dividing these accidents according to the texture implicated, to prove that a burn is not a simple, but a very compound disease, consisting of many and various degrees, presenting decided characteristic marks, differing in the effects they produce and in the treatment they require; this treatment is to be based on the same general principles which actuate the practice of the surgeon in similar injuries, produced by other causes. It would not be more absurd to class destruction of the skin, rupture of a muscle, ecchymosis, and fracture of a bone, under the head blow, and recommend a single application for its cure, than to comprehend under the same term the complicated injuries of destructive burns, and recommend turpentine, wool, or flour, as an infallible specific in all.

ART. I. VOL. II.—CICATRIZATION OF BURNS.

Where there has been actual loss of substance, a new structure, of a peculiar fibro-cellular texture, is formed, which M. Dupuytren denominates "tissue of cicatrix" ("tissu de cicatrice.") If the work of re-production proceeds regularly, the loss of substance is in great measure repaired; but, under opposite circumstances, a bad cicatrix is formed, producing deformity, adhesions, &c. These results may follow any loss of substance, but they vary according to its depth and extent.

1st Degree. When this is followed by erythema, as there is no loss of substance, there can be no cicatrix; but in chronic cases, as in women who use chaufferettes, and old people or invalids, who sit very near the fire, &c. the long-continued application of heat produces stains, and even destruction of the epidermis.

2d Degree. In the mildest vesications, as in blisters, which are removed as soon as a vesication is formed, a new epidermis is produced in from one to five days, and redness of the part only remains, which disappears in a few weeks. Such an application produces no change in the colour of the negro's skin. But if the action of heat has been more intense, or that of a blister prolonged, a serous discharge takes place for a few days, followed by suppuration; this may be mild, or, if neglected, may be abundant. The effects of profuse suppuration may be a complete destruction of the rete mucosum, as in the third degree, or partial disorganization, in which case the colouring matter becomes of a much deeper hue, and the scars are marked indelibly with yellow or brownish spots. In the negro, the skin of such cicatrices is of a darker colour than that of the surrounding parts. Where the rete mucosum has been destroyed completely in some parts, and disorganized in others, the cicatrix is variegated. The knowledge of these facts will be useful in the application of blisters, as in women, or in conspicuous parts of men, the suppuration should not be continued long enough to produce a scar. In cases where the long-continued action of a blister is necessary, it is better to apply numerous ones for a short time, sometimes on one place, sometimes on another. It is clear that, in these consequences of burns, when the inflammation passes its ordinary limit, it should be diminished by emollients, &c. and even by bleeding, care being taken to avoid topical irritants, and to remove the broken epidermis, in order to hinder or suppress the suppuration. In those cases where the surgeon is called in after tedious suppuration has destroyed the rete mucosum, or disorganized it, he must

equalize the granulations, by rubbing the surface of the wound with nitrate of silver, and dress it with compresses of linen, covered with ointment; employ desiccating substances, and sheet lead to produce equal pressure. These means generally produce an even cicatrix, but they will not remedy the yellow or brown discolorations; indeed time very rarely even modifies their colour.

3*d Degree.* In this, the epidermis and rete mucosum are completely destroyed, together with a portion of the true skin, and the cicatrix is formed by means of the layer of the corium which remains. When the eschar is detached, numerous red points are seen at the bottom of the wound, on a whitish ground; this is formed by part of the corium which has not been destroyed, and the red points are the summit of the small cellular bundles, fixed in the areolar cavities, and supporting the nerves, arteries, veins, and lymphatics, which are distributed on the external surface of the corium. These red points soon increase in number, and so totally obscure the whitish ground, that the wound has a uniformly red appearance. The cicatrix is, therefore, formed by these cellular, vascular, and nervous elevations. But, however instantaneous has been the application of the heat, it never destroys the tissues to an equal depth; hence the inequality of the granulations, and, if neglected, the uneven cicatrix. In the treatment, similar means to those recommended in the second degree are necessary; adhesions between separate parts are to be prevented by the interposition of foreign bodies, as linen smeared with cerate, charpie, &c. and the obliteration of natural openings opposed by the introduction of tents, canulæ, &c. M. Dupuytren has used for many years, with great success, an ivory instrument, so constructed as to be introduced into the nostrils where a portion of the nose has been destroyed by a burn, or removed in an operation. It is of great importance to apply the dressings so that the pus may be immediately absorbed, and remain as little as possible in contact with the wound. For this purpose, M. Dupuytren applies immediately over the burn a fold of linen, pierced with numerous holes, very close to each other, and above that a layer of charpie, confining the whole with a many-tailed bandage. After suppuration has continued some time, the granulations become more firm and fibrous, this change commencing at their base. A thin epidermis is then deposited on their surface, under which the rete mucosum is formed, of a bright red colour, irritable, easily thrown into a state of congestion, and often the seat of erysipelas. This imperfect rete mucosum is generally deprived of pigment. Thus, in the negro, such a cicatrix is white, and whiter in the European than the surrounding skin. In other cases, it is wholly or partially re-produced; but such a new production is always imperfect—its colour is not similar to the old one, nor can this be remedied. The epidermis, at first thin and scaly, acquires in time all the properties, except the colour, of the old one.

4*th Degree, or complete Destruction of the Corium.* After the eschar has sloughed, the bottom of the wound formed by the subcutaneous cellular tissue is red and irregular, from the numerous granulations which cover it; in its edges is seen a red circle, the rete mucosum, beneath which a white circle, or the corium; these layers are unequally destroyed. The wound contracts daily, its swollen edges subside and approach each other, the surrounding skin yielding to the traction. If the wound is very large, the skin

having arrived at its maximum of extension and displacement, a new tissue replaces that destroyed. If the skin or position allows sufficient extension, the edges unite. When, in order to prevent deformity, a position is adopted which opposes the approach of the edges of the wound, it is repaired by a new structure. Thus, if the skin of the occiput is burned to the fourth degree, the cellular tissue being short, and not readily extended, a new tissue is formed; if, on the other hand, the skin is destroyed on the palm of the hand, and of the palmar surface of the fingers, and the case is neglected, the edges of the wound will contract as far as possible, until the fingers are immoveably fixed together, or to the palm; but if the hand has been forcibly extended, a new tissue is produced, and the motions of the hand are free. Similar deformity takes place in burns of the axilla, ham, neck, &c., or the deformity is reversed if the burn is in the direction of extension, thus, in burns of the back of the hand, the fingers may be bent backwards, &c. The following is the mode in which the cicatrix is formed. The granulations, which are at first small, are in process of time completely changed, their cellular substance becomes cellulo-fibrous, and very hard; this replaces the corium; when once this is formed the new skin is speedily completed, a very imperfect rete-mucosum, deprived of pigment, is produced, and an epidermis, which in a short time differs very little from the natural membrane. The production of the new corium is a very difficult process, (or, according to the present French fashion of *explaining* such difficulties, "la production coûte beaucoup a la nature"!) but as soon as this is effected, the remainder of the cicatrix is completed with remarkable rapidity. Thus it is often astonishing to see a wound which has continued one, two, or more months without any change, heal suddenly in a few days.

In the treatment of the cicatrization of these wounds, the first remedy is position of the limb, and the general rule to regulate this is, to place the part in a position diametrically opposite to that which will favour the cicatrization of the wound by the approach of its edges. The end to be obtained by this is to form a cicatrix of the size of the skin which has been destroyed, and even of greater dimensions, as the new tissue is peculiarly retractile. Thus, if the fold of the elbow-joint, the palm of the hand, the groin, ham, &c. are burned, the limbs must be forcibly retained extended until the cicatrix has formed, and vice versâ. But where the skin of the whole circumference of a limb is destroyed, a medium position must be preserved, so that the cicatrix may be of as little inconvenience as possible; or the limb placed sometimes in one position, sometimes in another, in order to hasten the cicatrization on one side, and to retard it on another. In some destructive burns the weak state of the patient prevents position being attended to, as the necessary precautions would endanger life. In such cases the friends should be informed of the inevitable consequences. In some regions of the body the regulation of position is impossible, or extremely difficult, as in the face. Thus in a burn of the fourth degree, implicating the lower eye-lid and the cheek, it is impossible to prevent the junction of the edges of the wound, so that the eye-lid is almost united with the upper lip. Great deformity also results from burns of the forehead, temples, upper eye-lid, hairy scalp, &c. When position cannot thus be employed, the fall of the eschar should be delayed as long as possible, as this tends to separate the edges, and when it has fallen, the cicatrization

must be hastened by frequently cauterizing the part with nitrate of silver. M. Dupuytren has found that this application hastens the formation of an accidental cutaneous tissue, rendering the cicatrix equal, flat, and exempt from those deplorable elevations which expose the want of skill or negligence of the surgeon. The wound should be frequently washed and dressed. Position should be persevered in for a month, six weeks, or more, after the cure of the patient, and then should be gradually suspended; for the contractile power of the new tissue may produce much subsequent retraction. Bandages are necessary to retain the parts in position. Thus, if the anterior, posterior, or lateral parts of the neck are burned, in order to bend the head in the proper direction, leather straps should be fixed by some turns of a circular bandage to the head, and by their other ends to a bandage round the body. If the anterior part of the arm is burned, extension should be kept up by a posterior splint and circular bandage. If any part of the circumference of the wrist is burned, a pad is to be placed on the opposite side of the arm, reaching to the wrist, above that a splint extending to the ends of the fingers, and taking advantage of the space between the hand and the splint, the former is to be bent on the latter by some few turns of the bandage which was employed to fix the pad. If the palm of the hand and fingers are burned, the extension is to be kept up by means of a pad on the posterior surface, and over that a splint the size of the extended hand, having ten holes for little bandages to confine the fingers, or cut into the shape of fingers. In burns of the second and third degrees, adhesions of contiguous surfaces may be prevented by separating them by the interposition of foreign bodies, and moving them at each dressing; but in more severe burns compression must be employed, by a long and narrow strip of linen, the middle of which is to be placed in the angles formed by the junction of the fingers, and the ends are to be fixed to the fore-arm, one in front and the other behind it; if this is not attended to, the hand will have the appearance of the foot of a web-footed animal. Where either of the natural openings of the body are thus burned, great attention must be paid to the constant introduction of tents, canulæ, &c. which should always exceed in size that of the natural outlet, and should be continued for a long time after the cure. Adhesive plasters may be of some use in preventing deformity when position cannot be employed.

5th Degree. In these burns, where the motor organs are so deeply involved, nothing else can be done than by placing the part in such a position as will produce the least inconvenient cicatrix; but generally the disorganization is so great, that in order to save life, cicatrization must be accelerated without regard to subsequent deformity.

Physical, Anatomical, and Pathological Characters of the Cicatrices succeeding Burns. It is not until many weeks or months after a wound is healed that the cicatrix is completely formed, it gradually acquires a density and thickness necessary to supply the deficient skin, and at the same time diminishes in extent. This retraction does not cease until the cicatrix has become white and solid. If examined in this state it will be found to be covered by a thin, shining, and very adherent epidermis, beneath which is a dense tissue formed of fibrous layers crossed in every direction; a substance analogous to the corium; no trace of a rete mucosum remains, and

consequently the cicatrix of a Black is similar in colour to that of a White. This new product contains neither sebaceous follicles, nor hairs, that is, if the whole thickness of the skin has been destroyed; the cicatrix is consequently dry, and the absence of the sebaceous fluid should be supplied during the progress of retraction by oily applications, warm and gelatinous baths, &c. It is pierced with very few exhalants or absorbents, hence it is dry, whilst the surrounding parts copiously perspire. A laminated tissue, more or less compact and deprived of fat, unites the cicatrix to the subjacent parts, and is depressed in proportion to the loss of substance which it has replaced, or to the quantity of surrounding adipose tissue. If muscles, tendons, &c. have been partially destroyed, the cicatrix adheres closely to them, and they lose for a short distance their natural texture, and degenerate into an homogeneous fibrous tissue, which is intimately united with the new product. A practised eye distinguishes immediately the cicatrix of a burn from that produced by scrophula, syphilis, &c.; in legal medicine this is of great importance, and no opportunities of examining such injuries should be lost. The vascularity of cicatrices is variable. Commonly there are but very few capillaries, into which it is very difficult to throw injections. From the sensibility of these parts when touched or inflamed, and in changes of weather, it is probable that they receive a few nerves. Like all anormal organized products they are destroyed by inflammation with prodigious rapidity. In a few hours or days the reparatory work of many months is destroyed; however, this distinction is often confined to the upper layer of the new product, which is speedily restored. They are generally unaffected by exanthematous diseases. Cutaneous adhesions uniting burned parts are at first large, soft, and reddish, becoming like the cicatrices more intimate and solid as their organization is completed. Subsequently they are elongated by the motion of the parts, decreasing in breadth as they increase in length, so that they are changed into thin membranous layers, their free border thickened and forming a kind of cord. Analogous at this stage to the membranes of web-footed animals, they are completely organized, and never change their form or size. Until they have attained such organic perfection they should not be subjected to surgical operations.

The Means of correcting Deformities resulting from the vicious Cicatrices of Burns. These consist either in too narrow or too prominent cicatrices, or in unnatural adhesions and obliterations. These are to be remedied only by a severe operation; which will be more easy of execution and successful in proportion as the adherence is superficial. If the motor organs are implicated the deformity may be corrected, but the motions of the part can very seldom be restored. An operation should not be attempted, 1st. until some months or even years have elapsed since the formation of the cicatrix, as the new substance is so imperfectly organized that it may be destroyed by the least cause, or even spontaneously. 2dly. Unless a larger cicatrix may be obtained by position or bandages; this applies especially to the face. 3dly. Unless it will restore the forms and functions of the parts. It will therefore be useless if the articulations are anchylosed, or the muscles destroyed, &c. The operation which M. Dupuytren has adopted is the following.

If it is required to remedy the deformity arising from a very narrow cica-

trix, it is necessary, 1st, to make many incisions of the same length and depth as the cicatrix. 2d, To extend the parts, in order to bring them into a direction opposite to that into which they have been drawn by the cicatrix, and to obtain a new cutaneous tissue. If the parts are flexible, they may be brought immediately into the natural position; but if they are stiff, the extension must be slow and gradual, otherwise excessive pain, inflammation, &c. will result from the employment of force. A mechanical apparatus attached to the splints, by which a permanent and gradual extension is kept up, is of great utility. 3d, Subsequently to the operation, the same treatment is to be adopted as has been recommended after the detachment of the eschar of a burn. Secondary adhesions often form, which must be divided. If the cicatrix is too prominent—1st. A double-bladed, thin scalpel must be held flat, and passed through it about its middle; the cicatrix should then be removed on a level with the skin, by cutting out towards each extremity. 2d. The lips of the wound should be separated. 3d. The surface should be cauterized constantly, in order to keep the granulations a little below the level of the skin. If there are simple unnatural adhesions, 1st, they should be freely divided; 2d, the parts should be retained separate; 3d, a methodical compression on the angle of union should be kept up. If it is required to enlarge a contraction, or to remedy an obliteration of a natural opening, a knife or trochar should be used, and meshes or ivory tubes introduced. The new cicatrices have the same tendency to contract as the old ones, hence the necessity of long-continued extension; and baths, emollient applications, and oily embrocations.

In deformities produced by scars of burns of the second and third degree the operation will not be severe as they are very superficial. If adhesions exist between large surfaces, as between the arm and trunk, or the two thighs, the whole operation should not be attempted at once, as it might produce a dangerous wound. M. Dupuytren appeals to his clinical pupils for many years past to prove the success of his operations. Two cases are detailed, and a large body of facts are promised. The first is that of a child of four years old, whose little, middle, and ring-fingers of one hand were flexed on the palm, owing to a neglected cicatrix from a burn of that part. Transverse and perpendicular incisions were made, and the hand was extended for four months, when the parts had recovered their functions. In the second case, the hand of a child, 10 years old, was bent on the fore-arm by a membranous connexion extending from the middle and anterior part of the fore-arm to the palm of the hand. This resulted from a neglected burn eight years previously. This connexion was divided by three transverse incisions; gradual and constant mechanical extension was kept up for six weeks, when the child left the hospital, having a very fair use of his hand.

M. Dupuytren objects to the total removal of a cicatrix as likely to expose the patient to the most serious consequences, by laying bare subcutaneous cellular tissue, aponeuroses, and even bones, from which violent inflammation and profuse suppuration may ensue; and, also, as the disease may have an indefinite duration, and as in many cases it will be impossible to obtain an entirely new cicatrix to replace the lost tissue or the old scar. These objections are inconclusive as they are applied to an operation in cases in which the destruction is so great that Mr. Earle would hardly ad-

vise his operation or even M. Dupuytren recommend incisions. The success which has attended Mr. Earle's own cases fully prove the utility of his practice in less severe injuries, but still the severity of the operation, and the tedious cicatrization of the wound, are serious objections to its general adoption. It is to be hoped that this plan of M. Dupuytren's, which (although not acknowledged) is but a modification of Mr. Earle's, the principle of which was the formation of a new and more extended tissue in the place of the contracted one, as it offers less difficulty and danger, will be found to be attended with results as successful. Experience of a large number of cases which have stood the action of *time*, the great test of all these operations, can alone decide. We are sorry that the compilers of these lectures have not given a general table of the results of the numerous operations stated to have been performed at the Hôtel Dieu.

Fractures of the Neck of the Os Femoris. M. Dupuytren enters into a methodical and clear explanation of the causes of this injury, and of the changes which age produces in the form and structure of the neck of the femur and of the surrounding parts, rendering it an accident almost peculiar to advanced life. Into these details our space will not allow us to enter, and we shall proceed at once with the treatment. The common mode in France is to keep the whole limb in an extended position by means of Dessault's splint; the inconveniences of this unnatural position, and the little success which attends it, struck M. Dupuytren, and he has been in the habit of applying to the treatment of this injury the principle so strongly recommended by Pott in common fractures of the shaft of the thigh-bone, that of semiflexion of the limb. Although this may be a novel treatment in Paris, it is not so in this country. It is commonly adopted in some of those hospitals (St. Bartholomew's for instance) which are supplied by Mr. Earle's ingenious mechanical beds, and we ourselves have been in the habit of employing pillows for the same purpose on the recommendation of a judicious country surgeon who has adopted the plan for many years. The directions however which M. Dupuytren has given are of such easy application, and the advantages which he states to have resulted from their employment are so great, that we make no apology for their insertion, particularly as the treatment of fractures by simple apparatus, which is at every one's command, when thus recommended, is of first-rate practical importance. The experience in the treatment of some of these injuries which a student gains in a large hospital furnished with every useful mechanical contrivance, is often of little service when he is thrown on his own resources in general country practice, particularly among the poor, who are most subject to such injuries, and the greatest sufferers by insufficient treatment. By simply raising the thigh so as to bend it on the belly, and using moderate traction, the leg being semiflexed and the pelvis fixed by assistants, reduction is accomplished, the limb regaining its natural length, and the foot its usual position. This is owing to the relaxation of the adductor muscles which had turned the foot outwards, and of the glutei and others which had drawn upwards the inferior fragment. If then the demiflexed position is the best to reduce the fracture, and to maintain it reduced, it follows that the best apparatus is that which retains the muscles semiflexed; this is the principle laid down by Pott, but singularly it was not applied by him to fractures of

the cervix femoris. M. Dupuytren forms his double-inclined plane with pillows. A pillow rolled into the cylindrical form of a bolster and retained in this shape by tapes, is to be placed at the top of two inclined planes, formed by many pillows placed one above the other, and united by sewing them together by one of their borders. One of these oblique planes extends from the ham to the tuber ischii, the other from the ham to the heel, their apex being at the angle of union of the thigh and leg. The thigh is to be fixed by a cloth folded "en cravate," passed over its middle, and its extremities are to be tied to the of the bed in a direction towards its foot; a similar bandage is to be placed on the anterior surface of the leg or the instep, and its ends fastened to the sides of the bed, in a direction towards its head. During the first month the thigh must be raised daily or nearly so, at the same time drawing it gently downwards, in order that both fragments may be in contact. When it is probable that consolidation has taken place the double-inclined plane is to be gradually lowered, by removing from time to time one of the pillows which form it, until they are all removed. The patients should keep their beds some days after this, and then should gradually commence walking, with great precautions. By employing this treatment, the fracture is consolidated without shortening, or at least with but little shortening, which is easily remedied by one heel being made rather higher than the other. Another advantage of this apparatus is, that it neither occasions pain nor uneasiness, which is of peculiar importance, when it is considered that old people are generally the subjects of this injury, in whom the work of reparation is peculiarly slow. Two cases are given of fracture of the neck of the thigh-bone; in the 1st, which occurred in a man 58 years of age, the pillows were removed about the 92d day after the injury, and no shortening had taken place—he could then move his legs with ease; on the 110th day he could walk easily with crutches. The 2nd case was that of a woman, aged 67; about the 65th day the apparatus was gradually removed—consolidation had taken place, and both limbs were of the same length. On the 85th day she left the hospital, cured, and using her limb very well.

ON WOUNDS OF THE HEART.

A few years since, all wounds of the heart were supposed to be mortal; but facts have proved that penetrating wounds, if narrow, are not only not instantaneously mortal, but that they may be cured. Thus, at Warsaw acupuncturation of the heart for cholera was practised. A ball was found lodged in the substance of the right ventricle of a soldier, who received the wound six years previously. Wounds of a few lines in extent, penetrating the cavities, are in some cases not so suddenly fatal as has been imagined.

Case 1. G. æt. 34, during a scuffle on Nov. 5th, 1831, received two wounds from a knife, one in the abdomen—the other between the fourth and fifth left ribs, on the edge of the cartilage of the fourth. From the wound in the chest there was considerable hemorrhage. He came into the Hôtel Dieu, his face pale and anxious, pulse extremely weak, but regular; pulsations of the heart regular, but hardly perceptible. The bleeding from the wound in the chest had ceased—there was no symptom of perforation of this cavity; left side sonorous, respiration regular, neither cough nor bloody

expectoration. Nothing solid, liquid, or gazeous had escaped from the abdomen, which is supple. Patient is tranquil. The wounds were dressed with adhesive plaster.

6th. Pulse quicker; skin hot. Bleeding to 8 ozs.

7th. Same state; patient tranquil. Bleeding repeated. At night, there were symptoms of cerebral congestion, and he became affected with hemiplegia of the left side of the body; intellect uninjured.

8th. Same state. Cupping behind the ears.

9th. On auscultation, the following phenomenon was observed: when the chest was completely dilated, the air appeared to overcome an obstacle, and to rush into a cavity. The cerebral symptoms increased, and on the 12th he died.

Examination—Abdomen. A wound of two lines in length, penetrating into the cavity of the stomach; its edges were almost in contact, and partly agglutinated by mucus. The stomach was not inflamed, nor did it contain blood. *Thorax.* The cavity of the chest contained four ounces of blood, furnished by the wounded intercostal artery. There was a transverse wound, $3\frac{1}{2}$ lines in length and one in breadth, of the middle part of the left ventricle, penetrating its cavity. The external fibres were the most separated, but the internal touched each other, thus closing the wound. The pericardium contained nearly an ounce of serum. *Brain.* Slight ramollissement of a part of the right hemisphere. It is probable that, in this case, the wound in the heart would have been cured, if the cerebral disease had not supervened.

Case 2. A large, sombre man, æt. 40, reduced to want by his misconduct, was imprisoned. He endeavoured to destroy himself by cutting off his penis with a knife, and although the instrument was blunt, he effected his purpose after using great force and perseverance. He was brought to the Hôtel Dieu, and ligatures were applied. For some days he remained in a calm state; but delirium, with other symptoms of cerebral excitement, came on, and he died in a semi-apoplectic state three weeks after the mutilation.

Necropsy. The membranes of the brain, as well as that organ were injected with blood. On raising the sternum, a large ecchymosis was seen on the pericardium, whose cavity was half filled with liquid blood. On seeking the source of this hemorrhage, many small wounds, filled by a fibrinous black clot, were discovered. In the centre of the ecchymosis of the pericardium, which occupied the anterior and superior part of the membrane, were two very narrow penetrating wounds, obliterated by small false membranes. On examining the outer part of the thorax, a small, round, cicatrized wound, about a line and a half in diameter, was found between the cartilages of the second and third rib of the left side. Beneath the skin, between the intercostals, and under the pleura was a large ecchymosis, extending from below upwards. The opening into the pleura was marked by a reddish-brown spot, and surrounded by pseudo membranes. The anterior border of the lung was not affected. There were five or six small wounds of the heart, the greater number penetrating the right ventricle. One was plunged into the interventricular septum—the other wounded, but did not penetrate the left ventricle. The substance of the heart was pale, and easily broken up

by the fingers. The ventricles contained some black fibrinous clots. Chronic inflammation and ulceration of the gastro-intestinal, mucous membrane. On investigating the case, it was discovered that a long needle, used by saddlers, was taken from him in the prison after he had mutilated himself. This attempt at suicide must, therefore, have taken place twenty-five days before his death. This time also accords with the state of the external cicatrix. This very small and sharp instrument had been driven in vertically, and directed towards the heart; when its point had reached the organ, it had been pushed many times into its substance. The narrowness of the wounds had prevented any hemorrhage from the cavity of the ventricles, the few ounces of blood in the pericardium appearing to have come from the substance of the heart. The pulse of this patient, although often examined, presented no anomalies, nor were there any other symptoms of an injury of the centre of circulation.

Case 3. A man, æt 30, in a fit of jealousy, endeavoured to put an end to his existence, by inflicting five or six wounds on the præcordial region with a file, the end of which he had sharpened. He threw up blood from the mouth, and there was much hemorrhage from the wound. On being brought into the Hôtel Dieu, air was observed to escape from the wounds, indicating that they penetrated the chest. Respiration short and weak, pulse small and irregular, and so much debility that bleeding was impossible; when signs of re-action occurred he was bled, and the evacuation was repeated on every exacerbation. Thirty-six hours after the injury, the patient began to spit up thick expectoration, mixed with blood and pus. The wounds were then dressed, to prevent the introduction of air and hemorrhage; this seemed rather to relieve him. However, the symptoms became worse, and he died three days after the suicidal attempt. The fatal issue of the injury was hastened by the agitation produced by the sight of his mistress, and by an examination by the commissary of police.

Necropsy. There were two wounds above the left teat, and three below it. Considerable effusion of blood in the pleuræ; the left cavity contained air and black blood, partially coagulated, the quantity of which, together with the blood which escaped from the lungs, amounted to three or four pounds. Left lung compressed, and impermeable to air. Three or four openings in the left side of the pericardium, which contained a spoonful of blood and pus. Three wounds of the left ventricle, penetrating its cavity. On inflating the left lung, the air escaped at three openings, corresponding to the external wounds of the chest. The inner orifices of the wounds of the left ventricle were closed by small clots of blood. The blood which escaped externally, as well as that which was found in the pleura, came from a wounded intercostal artery.

M. Dupuytren has had many other similar wounds, in which the patients have lived two, three, four, five, six, eight, and fourteen days. In a thesis of M. A. Sanson, cases are given of wounds penetrating the left ventricle, where the patients have only lived five hours; and others, where both ventricles were injured, and life has been prolonged to five and twenty days. Such facts prove that penetrating wounds of the heart are not necessarily instantaneously mortal; they are undoubtedly very dangerous, but not hopeless.

Symptoms. If there are wounds of the præcordial region, with hemorrhage, general feebleness, faintness, small pulse, general pallor, cold extremities, vomiting, anxiety, want of sleep, oppression of the diaphragm, cold sweats, &c., there are great suspicions as to the nature of the injury. The diagnosis is difficult, as all these symptoms are rarely present. The treatment is similar to other penetrating wounds of the chest:—Bleeding, to diminish the quantity of blood and to prevent inflammation, according to the strength of the patient; repose; simple dressing to the wound, to prevent hemorrhage or the contact of air. If there is danger of immediate suffocation, from internal effusion of blood, the operation for empyema may be necessary; but this should never be attempted, unless the return of the heat and colour of the body indicate that internal hemorrhage has been arrested.

On Lithotomy.

The hypogastric operation, or the incision of the bladder above the pubes, should never be had recourse to, unless the small space between the tuberosities of the ischium, the presence of tumours at the lower opening of the pelvis, or the large size of the stone, render its extraction beneath the pubes either difficult or impossible. Le Frère Côme operated on 84 persons of different age, sex, and health, and the mortality was one to four and a half, a much less favourable result than is obtained from a similar number of lateral operations. M. Dupuytren's mode of operation will be best explained by the following case. M. le R. æt. 62, of a middle size, strong constitution, sanguineous temperament, great activity, and a good liver, experienced for a long time difficulty in passing his urine, and subsequent pain. Together with these symptoms he has for 10 years been occasionally subject to hæmaturia, after strong exercise or excess. During two years these symptoms have been aggravated, flow of urine almost continual and involuntary; he was sounded, but the surgeon detected no stone, and treated him for catarrhus vesicæ. The disease however increased, the urine passed guttatim, causing great exertion and excessive pain. His urine was ammoniacal and appeared to be mixed with blood, pus, and mucus. He gradually emaciated and was confined to his bed. M. Dupuytren was consulted, and found, on sounding the patient, that the beak struck against the stone before it entered the cavity of the bladder. He with difficulty succeeded in passing the instrument partially between the stone and the bladder, and when there, it felt as in a vice: on withdrawing the sound, he passed his finger into the rectum, and found the lower part of the bladder filled, dilated, and hardened by the foreign body. On bending the trunk he explored the hypogastric region, and felt, behind the pubes, at the base of the median line of the abdomen, a hard, resisting and voluminous body, which he could raise with the indicator placed in the rectum. M. Dupuytren explained to the patient that the cause of his illness was a very large calculus, and the sufferer anxiously demanded its immediate removal. The next day M. Dupuytren with M. Sanson, and other assistants, performed the operation. The introduction of a silver catheter between the stone and the bladder was found to be impossible, an injection was then thrown in, but was immediately returned. M. Dupuytren then resolved to perform the operation above the pubes. Standing on the left side, he bent the patient's legs on his thighs, and these

on the abdomen; M. Sanson, standing on the right side, introduced his finger into the rectum, and raised the stone so as to make it project as much as he could above the pubes. M. Dupuytren, with a bistoury, made a longitudinal incision three inches in length in the median line immediately above the pubes; he next divided the abundant adipose tissue, and the aponeurosis of the abdominal muscles; a transverse incision of a few lines was then made through the pyramidal muscles on each side, and between them the stone was felt more evident each time that M. Sanson raised it. Resting the cubital border of the indicator finger of the left hand on the symphysis pubis, and sliding on the angle of the finger the point of a sharp straight bistoury held in the other hand, M. Dupuytren plunged the instrument into the anterior part of the bladder immediately behind the symphysis pubis. White, thick, and consistent pus at the same moment filled the bottom of the wound, but as the knife had struck the stone this must have come from the bladder; the operator then enlarged the incision upwards for half an inch, and passing in the indicator finger which had guided the knife, he felt the stone, and ascertained that the bladder was half an inch in thickness; on further examination with the finger he found that there was a space of two inches between the most elevated point of the incision and the upper part of the bladder, which is generally covered by peritoneum; he therefore prolonged the incision upwards with a probe-pointed bistoury. The extraction was performed by means of the calculus forceps; having opened the branches and placed them one after the other over the stone, M. Dupuytren re-united them, and drawing them gradually upwards with a motion from right to left, whilst M. Sanson was also raising the calculus, he removed it. It was exactly the form of the bladder, which it had completely filled. It was $3\frac{1}{2}$ inches in height, 3 inches in breadth, and $2\frac{1}{2}$ inches in thickness. It was six ounces and a half in weight, and composed of the ammoniaco-magnesian phosphate. M. Dupuytren examined the bladder, which he found empty, and threw in an emollient injection which passed out with facility through the wound. The dressing was most simple; the patient was placed on his back, and his limbs slightly bent by a bolster placed beneath his hams, a large mesh of frayed linen was introduced between the lips of the wound into the bladder, over this was placed a piece of linen pierced with holes and covered with cerate, and above a layer of soft charpie. The abdomen was covered with flannel soaked with an emollient decoction. The patient felt immediate relief, and he slept two hours; in the night his belly became painful, with rigors followed by heat and fever; he was largely bled from the arm. In the morning he was considerably relieved, but as some tenderness remained 12 ounces of blood were taken; the urine flowed freely through the wound; on the fourth and fifth days suppuration was established, the urine soon began to pass through the urethra, and in about a month the cure was complete. Since this time the patient has enjoyed perfect health, with occasional symptoms of catarrhus vesicæ, which are readily removed. M. Dupuytren recommends, 1st, If the hypogastric operation is to be attempted, it should be done at first, and not as the last shift. 2dly. No incision should be made in the perinæum, but the sound (à dard) should be introduced immediately into the urethra, that is, when it is necessary to use it.

Lateral Operation. M. Dupuytren has been led, by experience and reflection on the frequently fatal termination of the common operation, to adopt a bi-lateral incision. In his first attempts at a new operation, he divided the neck of the bladder upwards towards the pubes, with the lithotome, after having made a longitudinal incision along the raphé. In a second operation he made a transverse incision with the lithotome; but although by the transverse division he avoided the two most formidable inconveniences of the lateral operation, wounding the rectum, or the arterial trunks, yet the bladder was reached with difficulty, and small calculi only could be extracted, whilst the rectum might be wounded as well as the scrotum by the longitudinal incision. Wishing therefore to preserve the advantages of the transverse incision, he made it semi-elliptic with its concavity backwards. Instead of making use of a common staff with an equal groove in its whole length, he used a lighter instrument, being of greater size, and having a deeper and wider groove at its great curvature for about two inches; the staff is terminated by an olivary protuberance, and is destitute of the cul-de-sac at the extremity of the common instrument. In order to divide the neck of the bladder, M. Dupuytren employs a double bistoire cachée, modified by M. Charrierè, an able instrument-maker of Paris. As this is to be obtained in all respectable surgical instrument-makers' shops we shall not enter into a description of it. The advantages of it are, that at a single stroke two openings can be made in the sides of the bladder, which vary in size from six to twenty lines in length.

Operation. The patient having been placed in the position adopted in the lateral operation, the channelled sound is introduced, and held perfectly vertically by an assistant. The operator rendering the integuments of the perinæum tense with his left hand, makes a semicircular incision with a double-edged knife, which commencing at the right, between the anus and the ischium, terminates at the left, at a corresponding point, having passed five lines in front of the anus, the anterior part of which it encircles. The instrument successively divides the subcutaneous cellular tissue, the superficial perineal aponeurosis, and the anterior point of the external sphincter ani. The commencement of the membranous portion of the urethra being exposed, the operator with the nail of the left indicator finger finds the groove of the sound, and directs the point of the knife into it. During the whole of the first part of the operation it is necessary to depress carefully the lower lip of the incision, to protect it, and to guard the rectum from a wound. After having made a small opening in the urethra, the lithotome held in the right hand, the thumb above and the two next fingers beneath it, is introduced into the groove of the sound, guided by the nail of the left indicator finger, which is held in the superior part of the wound. The contact of the two metallic bodies being well ascertained, the operator takes the handle of the catheter, and with his left hand depresses the instrument, so as to raise its point under the symphysis pubis, and slides the lithotome in the groove of the sound into the bladder. He then removes the catheter, and turns the lithotome, so that its concavity is towards the anus; then, grasping it with the right hand, he opens the two cutting instruments by compressing their extremities against the handle, and draws it out, not horizontally, but inclined downwards, until the blades are wholly withdrawn.

The left indicator finger being then introduced into the wound reaches the neck of the bladder easily, measures the extent of the opening, and guides the forceps. M. Dupuytren performed this operation twenty-three times in two years and a half, and but one case terminated fatally.

The following are the advantages of the bi-lateral operation. 1st. Its execution is more easy, expeditious, and sure, than the greater number of the other methods, particularly the lateral. 2d. The incision is made at the widest part of the pelvic outlet, and consequently at the most favourable point for the extraction of calculi. 3d. It is the shortest and most direct way to the bladder. 4th. It is superior to the lateral incision, as it makes an opening through the neck of the bladder and the prostate sufficiently large for the extraction of very voluminous calculi, without completely dividing the gland and making a dangerous incision. 5th. It avoids the ejaculatory canals. 6th. It may be practised on both sexes and at all ages. M. Dupuytren has performed this operation on about 70 individuals, six of whom have died, or one in twelve. He has operated with success on 26 persons successively. He does not pretend to assert that a fair average can be taken from so limited a number of cases, but when compared with a table which he has given of the results of other operations, the difference, even if a much greater proportion of fatal cases are allowed, is striking.

TABLE of the Results of 356 *Cases of Lithotomy collected during* 10 *Years, including those performed by M. Dupuytren as well as the most celebrated Surgeons of Paris or its Environs.*

SEX.	AGE.	Number of Operations	Cures.	Deaths.	Proportion of Deaths to Cures.	
MALE....	3 to 15 years	97	88	9	1 to 11	9 in 100
	15 to 30 ,,	59	51	8	1 to 7	13½ ,,
	30 to 50 ,,	45	35	10	1 to 4 or 5	23 ,,
	50 to 70 ,,	74	56	18	1 to 4	24 ,,
	70 to 90 ,,	7	26	11	1 between 3 & 4	29½ ,,
FEMALE..	3 to 15 years	7	7	0	0 — 0	0 in 100
	15 to 50 ,,	11	10	1	1 to 3⅓	10 ,,
	50 to 70 ,,	17	15	2	1 between 8 & 9	12 ,,
	70 to 90 ,,	9	7	2	1 between 3 & 4	22 ,,
TOTAL...	From 3 to 90..	356	295	61	1 to 6	17 in 100
MEN.	Ditto	312	256	56	1 between 5 & 6	18 in 100
WOMEN..	Ditto	44	39	5	1 to 9	11½ in 100

By this Table it appears, that in Paris the chances of death to cure after lithotomy are as one to five or six;—that the operation is best borne in infancy whilst the favourable chances diminish rapidly as the age increases. This mortality, which, if the different periods of time is considered, does not materially differ from that furnished by our provincial cases in the tables arranged by Mr. Smith, of the Bristol Infirmary, (Medico-Chirurgical Trans. Vol. XI. Part I.) proves lithotomy to be so dangerous an operation, that any modification of the common method which promises greater success

must be hailed with pleasure. But so much depends on the skill of the operator, that a fair estimate cannot be made of the success of any particular operation even from a large number of cases if performed by the same surgeon. M. Dupuytren certainly states that he has lost but six out of seventy cases by this mode, but these are the last seventy operations he has performed, and there are two hospital surgeons in this metropolis, one of whom uses the *gorget*, and the other Blizard's knife, the average mortality of whose cases is considerably less. Indeed, if the success of one man is to be taken as a criterion of the advantages of one operation over another, the favourable results which followed the practice of the late Mr. Martineau of Norwich, in whose hands lithotomy could hardly be called dangerous, would be decisive of the advantages of the common uni-lateral incision.

Besides the articles we have analyzed, there is another on painful subcutaneous tumours, which have been so well described in this country by Mr. Wood, and which M. Dupuytren considers always to require extirpation; another on phlegmonous erysipelas, containing nothing very novel; and a third on artificial anus—a subject which M. Dupuytren has treated at length in another work, a full analysis of which was given in this Journal at the time. The concluding part of the second volume contains the substance of M. Dupuytren's Lectures on Gun-shot Wounds—the result of the experience afforded him by the sanguinary contests in Paris, particularly in July 1830, and June 1832, which filled the wards of the Hôtel Dieu with every species of injury of this description. To this subject we shall probably, at a future time, revert, in a short article.

VI.

Outlines of Human Physiology. By *Herbert Mayo*, F.R.S. F.G.S. Professor of Anatomy in King's College, London; Surgeon to the Middlesex Hospital. Formerly Professor of Anatomy and Surgery to the Royal College of Surgeons. The Third Edition, 8vo, pp. 478. London, 1833.

We take shame to ourselves for not having directed the attention of our readers to this really excellent work at an earlier period. As it is not our habit to notice at length elementary productions, we disregarded this amongst the crowd, and were not aware till recently of its many merits. The present edition is so much enlarged, and contains new matter of so interesting a kind that we willingly take the opportunity of devoting some pages to its consideration. The work itself will be chiefly purchased by students; the portions to which we shall apply ourselves will be found to offer subject of reflection to those who are long past the age of pupillage, and thus we think we shall induce some of our elder professional brethren, especially in the country, to make themselves familiar with a work which all should possess, who are anxious to keep pace with the advancing knowledge of the day. Indeed this work is itself no mean evidence of the rapidity of that

advance. The edition before us and the first, which was printed but three or four years ago, are almost different works, so great is the addition of facts in the present. That such a treatise should be well appreciated by young men in the present day says much in their favour, and in favour of the intelligence of the age.

The part to which we now beg to call attention is that which is devoted to the consideration of the functions of the nervous system; and we may state at once, that, as we only propose to select such views or statements as may appear novel, or may be interesting on other grounds, we shall not, of course, offer a systematic analysis or criticism.

Mr. Mayo commences with an examination of the mental phenomena in man and animals. "It is difficult," says he, "to disbelieve that a common principle of consciousness exists in both; in the one expanded into a reasonable nature, in the other narrowed and subjected to blind impulse and necessity." In the latter opinion we cannot coincide with Mr. Mayo, but probably an opportunity of investigating this question more fully will present itself farther on. Mr. Mayo makes the following remarks upon sensation and perception.

"When adequate impressions are made upon our organs we are conscious of sensation. When, for example, coloured rays impinge upon the retina, sensations of light are produced in us. *Perception* is a term which in common discourse is used synonymously with sensation: we employ, for instance, indifferently the expressions, to experience sensations of colour, and to perceive colours. But metaphysicians attach different meanings to the words sensation and perception, and use the latter to express the knowledge of the presence and qualities of external objects which follows upon sensation. In order thoroughly to sift this distinction, let us analyse the very complicated impression which is conveyed to the mind through momentary exercise of an organ of sense. I look, for instance, at an object of such dimensions, that a glance serves to satisfy me respecting its nature: the impression which I receive through this experiment is threefold: comprising, 1. Present sensations of colour: 2. A conviction that those sensations are excited by something external: 3. A knowledge of the real size and form and distance of the object which I have seen. The second of these impressions, or the notion which we form of a something external as the cause of sensation, constitutes perception. The third class of impressions that I have described, and which we have learned to associate with the preceding, are our acquired perceptions.

Upon comparing sensation and perception in animals with the like affections in man, it is evident that the former have a partial superiority as to both. The vision of many birds, the sense of smell in birds, and in a still higher degree in many quadrupeds, is more acute than our own. The sense of smell in animals is closely connected with their most powerful instincts. Its existence and its force may be traced even in creatures of a different caste of organization from ourselves. The aversion, for instance, which bees are said to show to particular individuals is probably excited through this sense. How far in man as in animals this sense might come to suggest motives of conduct, is curiously shown in the account by Dugald Stewart of James Mitchell, who had the misfortune to be born deaf and blind, and was thus deprived of the two most important channels through which knowledge is ordinarily received. I may quote the following statement, given upon the authority of Mr. Wardrop.

'When a stranger approached Mitchell, he eagerly began to touch some part of his body, commonly taking hold of his arm, which he held near his nose; and after two or three strong inspirations through his nostrils, appeared decided in his opinion. If it happened to be unfavourable, he suddenly went to a dis-

tance with the appearance of disgust; if favourable, he showed a disposition to become more intimate, and expressed by his countenance more or less satisfaction.'" 187.

Mr. Mayo proceeds to observe, that with human beings the faculty of perception is of slow growth, and that this is not owing to the general imperfection of the infant's mind, he concludes from the history of the couched patient related by Cheselden. That patient was born blind; when sight was given at adult age, he thought at first that all objects which he saw touched his eye, "as what he felt touched his skin." But this is by no means an analogous case. This gentleman had been educated, if we venture to use the expression, in the sense of *touch*—it was by touch only that he knew the more obvious qualities of the material world—this was, so far as vision was concerned, a false education—and can it be wondered at if experience was necessary to convince him of the inapplicability of the sense he had to a totally novel order of impressions.

But in animals, says Mr. Mayo, the faculty of perception is wonderfully perfect at first and at once, and he quotes, from Dr. Smith, the familiar instances of chickens, the young of the partridge and the grouse, the young of several sorts of animals, &c.

It appears to us that this is by no means so general a law as has been stated. Some animals are born more capable of independent existence than others. The blind kitten is little, if at all, better off than the puling babe. Who that has observed a nestling can pretend that the helpless, naked bird, was born with its instinct perfect and at once! It is notoriously not the fact. Nay, the perceptions of animals are only perfected by experience. The kitten that, prompted by its instinct, pursues with watchful activity the paper dangling from the schoolboy's hand, shuns such unprofitable and vain pursuit when matured into the cat. The cat that, for the first time, sees its image in the mirror, seeks or shuns its imaginary fellow; but a little experience makes it also wise, and, if it cannot reason philosophically on mirrors, it evinces a practical knowledge of the delusion. We are quite convinced that the more this matter of instinct is examined, the more will it appear that too much is attributed to it. That the human being is at its birth, and for some time afterwards, the most helpless of animals, we are willing to allow, but that the gulf between the reputed perfect instinct of the young of other animals, and its nascent reason, is so wide as is pretended, we are far, very far, from being convinced. In short, we look upon the unconditional expression of this assertion as unphilosophical and savouring somewhat of a vulgar fallacy.

But what is instinct? Take the following observations of Mr. Mayo.

"Upon referring to the ordinary operations of our own minds, volition appears to take place whenever we anticipate a greater degree of gratification or advantage from exerting than from repressing it. We know by experience the prompt influence of the will over our muscular frame: we are able to conjecture with more or less certainty the consequences of different voluntary actions: and we *will*, with a general or precise anticipation of what the result will be, and in order to obtain it. A hungry person knows that the food he prepares to eat will gratify his appetite: a drowning person hopes that his cries will bring people to his assistance. But there are instances in human beings in which intelligent motives cannot be assigned for voluntary actions. The infant at the

breast, or struggling when first plunged into water, employs muscular efforts for its sustenance or preservation, no less *voluntary* than those which the schoolboy makes when draining his orange, or the exhausted swimmer when he calls for help. But in the infant, the motive which leads to the voluntary effort, is not the anticipation of pleasure or advantage, but a spontaneous tendency, a blind inclination, an instinct.

Instinct then appears to consist in a natural tendency to execute certain voluntary movements, without any previous conception of the object they are calculated to attain, upon the occurrence of particular sensations or states of inward feeling. This account of instinct corresponds very nearly with the popular meaning of the term. The modifications of this property, as I have described it, are especially characteristic of human and brute intelligence: in man they are subdued and subservient to reason; in animals they greatly surpass in vigour and influence the faint glimmerings of reason which they exhibit, and in some instances curiously rival in their effects the most elaborate results of human thought." 190.

Mr. Mayo observes, that it may be denied that instinctive actions are voluntary, because we retain no consciousness of having exerted the will at the time of their performance. To this Mr. M. objects, that actions generally allowed to be voluntary may, when so frequently repeated as to constitute habit, be unconsciously performed. Mr. M. criticises Sir Charles Bell's theory of the respiratory or superadded system of nerves, and observes, with reference to the portio dura, that it is both a voluntary nerve and one of instinctive action. Voluntary actions may be substituted for instinctive ones; thus we may alter, for a time, our rate of breathing, mimic the expression of passions, and so forth. The conclusion, says Mr. Mayo, towards which the preceding arguments tend, has the additional advantage of being intrinsically more philosophical than that to which it is opposed; in classing instinct as a motive to the will, it is supported by analogy; while that which represents it as a principle equivalent at once both to motives and volition, disregards all analogy.

That the impulse which we denominate instinct does act, in a great many instances, through the medium of volition, cannot be disputed. But we are not convinced of the universal truth of Mr. Mayo's conclusion. Under the influence of the passions, which are instinctive, the voluntary muscles are not alone affected, but muscles and organs on which the will exercises no power are excited also. The first effect of fear is to check the circulation—the next to hurry the terrified individual backwards. So general is the law, that Bichat, as is well known, has actually, and no doubt wrongly, placed the seat of the passions in the breast. Is the instinctive impulse to void the urine or the fæces, or is the sigh, an act of volition? We think not. In short, it appears to us that instinct operates through both the voluntary and involuntary muscles, and whatever the instinctive impulse may be, wherever situated, or however obtained, it is something above the will, and acting upon it, in common with parts and functions with which the will has no relation. We have as good right to affirm that instinct regulates the organic system as the volition, for the secretions, nay, all the functions of organic life, are modified and controlled by it. If, then, the instinct be considered as a motive to the will, it must be considered as a motive to the nervous system of organic life also. We need scarcely add, that these considerations do not inform us what instinct is.

"I shall now quote one or two examples of the instincts of animals, which may contribute to persuade the reader that instinctive actions are voluntary, and which will at the same time bring us to another disputable question, as to where instinct ends and reason begins. 'On dissecting,' says Galen, 'a goat great with young, I found a brisk embryon, and having detached it from the matrix, and snatched it away before it saw its dam, I brought it into a room, where there were many vessels, some filled with wine, others with oil, some with honey, others with milk or some other liquor, and in others there were grains and fruits. We first observed the young animal get upon its feet and walk; then it shook itself, and afterwards scratched its side with one of its feet; then we saw it smelling to every one of these things that were set in the room, and when it had smelt to them all, it drank up the milk.' What is this but an instance of sensation occasioning a blind impulse to a determinate course of voluntary action." 193.

But suppose that the goat had lapped the oil or wine. Would not its stomach have rejected the unnatural food? Now we have no right to select the first of the checks against self-injury placed by Nature, as alone constituting instinct; and the circumstance of the stomach refusing to digest, what, if digested, would be prejudicial, would not be an instance of a sensation occasioning a blind impulse to a determinate course of voluntary action. The young animal probably preferred the milk, because it afforded most pleasure to its sense of smell or sight, and perhaps it is thus through the medium of the senses, that instinct is in many cases made by the Creator to act. But instinct often far transcends this.

"If a hive of bees be this year in possession of a queen duly fertilized, and consequently sure the next season of a succession of males, all the drones, towards the approach of winter, are massacred by the workers with the most unrelenting ferocity. To this seemingly cruel course, they are doubtless impelled by an imperious instinct: and as it is regularly followed in every hive thus circumstanced, it would seem at the first view to be an impulse as intimately connected with the organization and very existence of the workers, and as incapable of change as that which leads them to build cells or to store up honey. But this is far from being the case. However certain the doom of the drones this autumn if the hive be furnished with a duly fertilized queen, their undisturbed existence over the winter is equally sure if the hive have lost its sovereign, or her impregnation have been so retarded as to make a succession of males in the spring doubtful. In such a hive the workers do not destroy a single drone, though the hottest persecution rages in all the hives around them.*'

Now how are we to explain this difference of conduct? Are we to suppose that the bees know and reason upon this alteration in the circumstances of their community—that they infer the possibility of their entire extinction if the whole male stock were destroyed when without a queen—and that thus influenced by a wise policy they restrain the fury they would otherwise have exercised? This would be at once to make them not only gifted with reason, but endowed with a power of looking before and after, and a command over the strongest natural propensities, superior to what is expected in a similar case even from a society of men; and it is obviously unwarrantable. The more probable supposition is, that here again the conduct of the animal blindly follows an impulse originating from impressions on the senses: in other words, that a new instinct is developed, suited to the extraordinary situation in which the community stands, leading the work-

* Kirby and Spence's Entomology, vol. ii. p. 454.

ers now to regard with kindness the drones, for whom otherwise they would have felt the most violent aversion." 194.

It is evident that the latter supposition merely amounts to this, that the cause is instinct. The final intention is sufficiently clear, the efficient and immediate agency perfectly unknown. To believe that such foresight and precaution depend upon actual reflection, would argue such a degree of reason in these creatures as few can make up their minds to admit. But animals display what cannot but be considered more than instinct, more than a blind impulse, born with them, and perfect at its birth.

" It is evident that in animals, as in human beings, impressions once traced upon the mind may recur to it. Whoever has observed a dog during its sleep prick its ears and whine, must be persuaded that the animal dreams: in other words, it has the faculty of *conceiving* former objects of sense.

It is not less certain that animals have memory: this is shewn in the power of personal recognition which they evince.

The principle of imitation again exists in various degrees in animals. This principle is one that modifies instinct. A bird untaught will practise from instinct the song of its kind; but placed under circumstances where it hears another song exclusively, the young bird learns the notes in place of its proper song.

Animals display a principle analogous to the association of ideas, and that no less in a wild state than when tamed. The wariness which wild animals acquire with age is evidently attributable to this principle, and the education of domesticated animals is founded entirely upon it.

Animals certainly possess a power of attentive observation. When you have thrown a ball two or three times in succession for a dog to fetch, if you repeat the gesture of throwing, but retain the ball in your hand, the animal starts headlong after the object you have feigned to throw; but it quickly discovers the deceit: and now, when you would repeat the deception, the animal carefully watches whether the gesture of throwing be real or a feint, before it starts upon its course.

But the most remarkable illustrations of this faculty in animals, or rather perhaps of correct observation combined with surprising accuracy of recollection, are to be found in those cases in which animals have made their way home by a route they had never before pursued. That a dog should retrace its exact path for a hundred miles by the sense of smell, or that a carrier pigeon, even with the acute vision of a bird, should see its way towards home, are things sufficiently wonderful; but that an animal should discover its path home without any conceivable guide but *the remembrance of the direction* in which it has been brought, can scarcely be believed, even where its occurrence is perfectly attested. The following, which I extract from Messrs. Kirby and Spence's Entomology, is the most marvellous instance of the kind which I have read of.

' In March, 1816, an ass, the property of Capt. Dundas, then at Malta, was shipped on board the Ister frigate, Capt. Forrest, bound from Gibraltar for that island. The vessel having struck on some sands at Point de Gat, at some distance from the shore, the ass was thrown overboard to give it a chance of swimming to land—a poor one, for the sea was running so high, that a boat which left the ship was lost. A few days afterwards, when the gates of Gibraltar were opened in the morning, the ass presented itself for admittance, and proceeded to the stable of Mr. Weeks, a merchant, which he had formerly occupied, to the no small surprise of this gentleman, who imagined that from some accident the animal had never been shipped on board the Ister. On the return of this vessel to repair, the mystery was explained; and it turned out, that Valiante (as the ass was called) had not only swam safely to shore, but without guide, compass, or travelling map, had found its way from the Point de Gat to Gibraltar, a distance

of more than two hundred miles, through a mountainous and intricate country, intersected by streams, which he had never traversed before, and in so short a period that he could not have made one false turn.'" 196.

But in other and in common instances, animals display the nearest approach to human reason. They acquire sagacity with age, that is, they are capable of profiting by experience. Examples of this must be familiar to all. The following singular fact is quoted from Dr. Fleming. The hooded crow of Zetland, when feeding on the testaceous mollusca, is able to break some of the tenderer kinds by means of its bill, aided in some cases by beating them against a stone; but as some of the larger shells, such as the buckie and the whelk, cannot be broken by such means, it employs another method, by which, in consequence of applying foreign power, it accomplishes its object: seizing the shell with its claws, it mounts up into the air, and then loosing its hold, causes the shell to fall among stones (in preference to the sand, the water, or the soil on the ground) that it may be broken, and give easier access to the contained animal. Should the first attempt fail, a second or a third are tried, with this difference, that the crow rises higher in the air, in order to increase the power of the fall, and more effectually remove the barrier to the contained morsel.

Mr. Mayo observes that, notwithstanding the capability for improvement, the contrast is still decided between the most sagacious animal, and man under the most unfavourable circumstances. In illustration of this he inserts Professor Glennes' very interesting account of a poor lad born blind and deaf. There is doubtless a broad gap between man and every other animal, but it is not because man possesses that of which every other animal is deprived—reason; but because he is gifted with a greater quantity than they. Define reason how we will, view it, consider it in what manner we may, it seems impossible to deny its existence in brutes. It certainly is not true that they possess only instinct, if by instinct be meant a faculty not improvable; and if instinct be improvable, in what does it differ from reason? The mind of brutes differs from that of man only in the degree of its rationality, and from the lowest in the scale upwards we discern an improving series. That man infinitely excels the brute there can be no question, nor need we wonder when we look at the immense development of his brain, and the general perfection of his nervous system. Suppose that the lower animals had been gifted only with instinct; a faculty at once perfect and susceptible of no further extension. Memory would have been of no service to them, because it would not have tempted them to seek former gratifications or avoid former dangers; when placed in new circumstances they could scarcely have accommodated themselves to them, and thus they would have been deprived of the benefit both of experience and of the power of accommodation to new relations. In short, to have given the lower animals a mind not susceptible of a certain amount of reflection and of improvement, would have been a mistake, which the all-wise Creator would never have committed, though many zealous and pious, nay, and able persons, have attributed it to Him; and to have given them more would have been inconsistent with the obvious plan of the creation and the mental supremacy of man.

Mr. Mayo proceeds, and in a very interesting manner, to enumerate the principles of human character, or of the human mind. He supposes the

mature individual to have a rapid but distinct view of the façade of a building, for instance, King's College. From this one sensation he shews how perception—conception, or the power of calling up the scene again—the association of ideas—attention—imagination—comparison—judgment, may spring. Or the individual might ask himself, is it true that such or such an architect designed this building, or are the objects for which it was erected good? Mr. M. introduces here an analysis of truth, or of evidence, which we are tempted to extract. He observes that, positive or absolute truth may be said to be that which would command assent if all the evidence were produced and understood. Practically speaking, the evidence which determines belief, belongs to four classes, which are the following—

"A. Certain truths may be called intuitive, which whether shaped or not as distinct propositions, spontaneously arise in our minds, or are involved in all our reflections; and are of such a nature that to doubt them for an instant is impossible. Of this description are the following.

1. The belief which we entertain of the reality of those mental affections, of which we are conscious.

2. Our belief in the evidence of memory: in other words, our belief, when we remember to have experienced an emotion or impression before, that we really have experienced something similar on a former occasion. The strongest illustration which I can select of the conviction attending the evidence of memory, is our belief in our moral or personal identity; every man remembers feelings excited in him at a very early age by one incident or another; and recognizing on the evidence of memory their affinity to his present character, is sure that he who went through such an adventure is the same person who reflects upon it now.

3. The belief, that every change must have an efficient cause.

4. The belief that duration and space are without limits.

5. To many persons the evidence of perception appears of this description. The belief in the existence of an external material world bears indeed a close affinity to intuitive truth, inasmuch as it arises spontaneously in our minds, and cannot be seriously questioned by a rational understanding. Yet it must be admitted, that such is the constitution of our nature, that we can conceive it *possible*, that matter has no existence, and that our waking sensations, like those which we seem to experience in a dream, flow from some other cause than external material impressions.

B. Another class of truths comprise those which rest upon experience and analogy. When we have observed that certain consequences have uniformly followed certain antecedents, we are led by the constitution of our nature to expect the recurrence of those consequences, whenever we see their usual forerunners: thus, when we see the sun go down, we entertain no doubt that it will rise on the following morning; and so on in regard to the general order of nature; although it is evidently possible that that order may be interrupted tomorrow.

But the most remarkable illustration of the force which *may* belong to this kind of evidence, is to be found in the argument which the study of nature affords in proof of the existence of a God. All bodies, of which we can trace the history, that have a structure adapted to determinate purposes, have been contrived by intelligent beings. We therefore conclude analogically, when we meet with bodies of the origin of which we are ignorant, yet which have a structure and disposition adapted to determinate ends, that such instances likewise are the result of design, and have been produced by an intelligent cause. But Nature through all her reign exhibits to the most superficial, as well as to the profoundest observer, the most refined and sagacious adaptation of means to im-

portant ends. Nature then, we are compelled to believe, is but Art—the work of immeasurable wisdom and power.

A third instance of the conviction which flows from experience and analogy is, our reliance on testimony. The present instance serves remarkably to show the various shades of belief, which may attach to the kind of evidence which we are now considering. Who doubts that Socrates and our Saviour lived and died? and who believes the rumour of the day during the season of popular agitation? A child that has never been deceived, believes implicitly every assertion made to it. A statesman professes a distrust of history, upon his personal knowledge that it is sometimes falsified.

C. Mathematical truths are acknowledged to rest upon evidence so convincing, as to claim exclusively the title of *demonstration*. On what does the conclusiveness of demonstration depend? Or what is the nature of each step in mathematical reasoning? The proof in each instance amounts to this only: that the point in question is shown to be identical with one already admitted.

The certainty which belongs to syllogistic reasoning is of the same description. *Syllogistic proof* consists in shewing that the circumstance you would predicate of an individual has been already granted to belong to the genus.

Induction is the method employed in the discovery of physical causes. By means of an induction of well-chosen or well-contrived instances, the common and essential conditions in an entire class of phenomena are rendered apparent. Our belief in a law established by induction, arises from that law being but another and more general expression for what has been already shown to occur in every conceivable case that has admitted of investigation.

D. *Theoretical or circumstantial evidence*, is that which wins our belief by the concurrence of many probabilities towards one conclusion. The mind appears capable of receiving a collective impression from many single impressions. Every one knows how, in a fictitious tale, the feeling of horror excited by some harrowing scene is gradually heightened and wrought up by the skilful accumulation of incident upon incident. Thus in circumstantial evidence, each fresh probability augments the sum of our belief. There are many instances in which the degree of probability of an event admits of being stated numerically: in these the force of cumulative proof may be said to admit of mathematical demonstration." 203.

Mr. Mayo proceeds to describe Taste, and briefly alludes to Diversities of Talent and of Disposition, and enumerates those affections which form the active principles of our nature. Nothing can be more calculated to display the absurdity of that philosophy which regards the mind as a whole, a something half matter and half essence, of we know not what description or proportions, than the following conclusion at which some reasoners have arrived.

"All exercise of talent implies invention; from wit, which consists in presenting certain classes of ideas in novel and unexpected relations,—to poetry or design, in which new and just combinations of thought or conception are produced,—to philosophical genius, which is shown in creating or bringing together instances through which inductive truth may be elicited. Talent therefore of every kind works by the same processes; and thence it has been said, that difference of talent depends only upon the difference in the classes of associations upon which it operates, and thus that its particular direction in individual instances may possibly be accidental." 206.

It is right to observe that Mr. Mayo thinks it probably more just to look at the subject of, or the direction of talent as distinguishing, and its operations as subordinate, than to view the operations of the mind as the princi-

pal element, and the subject as an accident. When, undivested of the prejudices of the closet, we look at men as they are, we find them born with mental differences as striking as those which are observed in their corporeal frames. Under the same circumstances their talents, their tastes, their dispositions differ, and it is as philosophical to believe that the varieties of their complexions, or corporeal proportions, are the produce of some post-natal accident, as the equally marked varieties of their minds. But there is one fact which of itself conclusively demolishes the notion to which we have alluded. Parents with a tendency to insanity produce children with the same tendency. Now if the manifestations of mind did not depend on the qualities of organization, why should this be? Hereditary predisposition to disease is a common and an intelligible property of organized structures, but that the mind, "a something, nothing," should be generated lame and halting and impotent, is past comprehension, and defies belief. If then the *manifestation* of mind depends on organization, it follows, of course, that, organization being demonstrably different in different individuals, the phenomena of mind must differ also, which in fact they do.

It would almost be a waste of time, and certainly unbecoming in us, to prove that individuals are born with different mental capacities. Set a philosopher, who believes that peculiarities of talent depend on accidental circumstances, to educate a dozen Mozarts, or Homers, or Napoleons, or Newtons, and see how he would succeed. Let him take the material in its most ductile state—let him fashion the minds of his dozen neophytes from puling infancy upwards, and see how the experiment would succeed. He and his disciples would probably become denizens of Laputa.

"But what then is the mind, the possessor of these powers, the subject of these numerous affections and shades of humour? All that we know of it, is contained in the brief history of its affections, and the laws of their recurrence.

But is it, as the materialist imagines, the result of a particular combination of material atoms? Do thought and feeling flow from a change in organized structure, as music from the vibration of a string? Or is their subject something, which is essentially independent of, and may survive the dissolution of the corporeal frame?

Our knowledge upon this matter is contained in a small compass. In the first place, we can imagine that mind may exist without matter; there is no contradiction involved in supposing each material element of our frame destroyed, yet the distinct recollection of all we have done and suffered and enjoyed remaining. 2. It is utterly impossible for us to conceive how matter can produce mental phenomena. 3. We are in possession of the fact, that while our body changes, our mental identity remains. It is difficult to avoid concluding from these premises, that the human mind is something superadded upon and temporarily united to our living bodies, not a series of affections resulting from their material structure." 208.

We have shewn that brutes have something mentally in common with us, and it is acknowledged that we have instinctive feelings and passions in common with brutes. The mind, on Mr. Mayo's own shewing, is a composite thing; it is made up of capacities of thought and reflection, or the power of combining in many ways the impressions it has received, and of appetites and principles which it seems to bring with it, rather than to obtain from its intercourse with the world. Let us take then some of the attributes of the mind, or rather some of those phenomena, the aggregate

of which we call mind, and let us see to what Mr. Mayo's argument will lead.

Memory, we suppose, is a mental phenomenon. Now memory is shared with man by "the worm that crawleth." There is scarcely a creature that can be supposed altogether deficient in it, and some possess it in a very remarkable degree. If memory then be a quality of the mind, and if it do not depend upon organization, on what does it depend in the dog, or the horse, or in animals lower and viler than they? If it be utterly impossible to conceive how matter can produce mental phenomena, then we cannot of course conceive that matter has produced this mental phenomenon in those inferior creatures, and we, of consequence, necessitated to grant to them "a something superadded upon and temporarily united to their living bodies." What that something is we leave Mr. Mayo to determine.

Gratitude is an attribute of the human mind of no mean character. Mr. Mayo therefore cannot well conceive how such can be the produce of matter. But gratitude and affection for his master are qualities displayed by the dog in no slight degree, and it is just as difficult to imagine the gratitude of the beast the result and function of material organization, as that of the man.

We conceive then that, if Mr. Mayo's argument is worth any thing, it is this—that the lower animals have souls as well as man. Whether Mr. M. does actually hold this Pythagorean doctrine we cannot say, but certainly his reasoning admits of the reduction we have mentioned.

How mental phenomena are produced is a question beyond human power to solve. But this is certain, that in proportion as the brain is developed in the ascending scale of organization, in that proportion is the mind improved and perfected. That this is correct as a general statement is as certain as any demonstrated truth, though some exceptions may apparently or really exist. Concussion or compression of the brain destroy thought, partial lesions occasion partial affections of it. There is doubtless, then, an intimate connexion between cerebral development and mental, and whether there be something beyond the brain, or whatever may be the case, the brain is certainly the *organ* of the mind, and mental phenomena are its functions. If it be said that this doctrine is materialism, we can only reply that we are bound to endeavour to arrive at truth, whatever may be the consequences. Materialism, however, in this sense, is not opposed to revealed religion. Well-meaning persons injure the cause of religion, when they aim at mixing it up with philosophical questions of this nature. The creation of man was long antecedent to the revelation of religion, and it cannot be expected that his constitution should furnish proofs of it. If there is nothing in the material organization of man that is absolutely contradictory to Revelation, that is all that we need ask. That there is no such contradiction in the dependence of the manifestation of mind on matter, appears to us to be very clear. We know not what the soul is; we know not that mind may not be dissevered from matter, and made as independent of it in another state as it seems dependent on it in this; in short, materialism, in the sense in which we have taken and take it, neither makes nor mars a creed, and we fly for consolation and assurance to the only hand whence we can receive it, that of the divine Founder of our Faith.

Mr. Mayo proceeds to consider the phenomena of sleep, dreaming, som-

nambulism, and spectral illusions. The remarks on dreaming are very interesting. He observes, in reference to the state of the pupil in those who sleep, that if awakened by opening the eyelids under a strong light, the pupil, for the first second or two, is seen to be extraordinarily contracted, which may be presumed to be its usual state during sleep. We have often examined the pupils of sleepers, and we have usually found them dilated. If the lids were opened under a strong light the pupil contracted, but even then it shewed a greater tendency to dilatation than the pupil of a waking person. Mr. Mayo believes that a certain degree of consciousness remains during sleep. We think this cannot be doubted, and the degree of consciousness is less in proportion as the sleep is *deeper*, or more approaching to a lethargic character. In reference to dreaming Mr. Mayo observes,—

" But the phenomena of dreaming are not always confined to the spontaneous suggestions of the fancy; occasionally the mind seems to bend itself during sleep to an examination of the impressions which occupy it. It must have happened to every one during a dream to have suspected that he was dreaming, and after a process of deliberate reflection to have become satisfied that he was awake.

It was the opinion of Dugald Stewart, that in sleep 'the will loses its influence over those faculties of the mind, and those members of the body, which during our waking hours are subjected to its authority.*' In the remarks which I have made upon the phenomena of consciousness, I have employed the term will to signify exclusively that affection of the mind, which is the immediate cause of muscular action: that *this* influence is not in every case suspended during sleep, appears evident upon the fact already adverted to, that many animals sleep in postures which require a sustained muscular effort. But we seem to exercise a voluntary power likewise over the affections of the mind: let us examine, before resuming the preceding inquiry, whether the latter influence be suspended during sleep. The faculty by which we direct the mind at pleasure to one train or mode of thought or to another, is essentially unlike that by which we produce a series of voluntary movements. Under ordinary circumstances we are indeed equally led to either,—to analyse for instance an affection of consciousness, or to strip the shell from a filbert,—by the gratification it promises; but while in the one case the effect we desire is attained directly and instantaneously,—we will and the muscles act,—in the former the effort consists in fixing the attention upon a subject of inquiry, and patiently observing the bearing of every thought, which presents itself, upon the point before us. In producing a muscular effort, we will a physical change, and it instantly ensues; in an effort of thought, we but confine the mind to a definite tract, expecting that our established habits of association will bring us to the conclusion we wish.

Now it appears from an instance of dreaming already mentioned, that the mind can during sleep set on foot an analytical inquiry, and may compare its different impressions in order to arrive at a conclusion respecting their nature,—an operation as voluntary, if the expression be applicable, as any which the mind exhibits in its waking state." 211.

We confess that we are not altogether convinced of the reality of the distinction that Mr. Mayo has drawn, between volition determining a muscular action, and that exercise of the will which may perhaps be fairly styled attention, and which directs the mind to any particular train of thought. That the muscle, in the one instance, acts at once and definitely, whilst, in the other,

* " Stewart's Philosophy of the Human Mind, vol. i, p. 330."

the train of thought which we will is not a speedy and determinate effect, seems to prove a difference between muscular action and thought, not a difference between that which commands the exercise of either.

It appears to us that, as sleep is not death, it would be equally absurd to suppose the functions of the brain annihilated during its continuance, as the functions of other parts or organs of the body. Sleep is a state of comparative, not of absolute quietude—of relative, not total incapability of receiving impressions through the senses. A slight noise makes no impression; a louder one does excite sensation, and awakes. It is equally so with sight, and smell, and touch. Slightly pinch the skin of the sleeper, and, by an exercise of the voluntary muscles, he withdraws the limb, but does not awake. Pinch him more severely, and the sensation is not only sufficient to produce enough consciousness to will the contraction of the muscle, but it awakes him, that is, the consciousness becomes complete. Sleep is not an uniform state, but is different in degree in different individuals, or at different times in the same individual. That difference of degree seems merely to mark a greater or less amount of consciousness in the brain—a greater or less sensibility to impressions through the senses.

Dreaming is manifestly an excitation of the brain, by former sensations or by present impressions, at a time when its higher attributes or functions of attention, comparison, judgment, are little, if at all exercised. It should be recollected that our sensations or impressions are not merely those which we derive from the external senses, but are called up by our organic sympathies or instinctive feelings. Thus in the state of perfect waking, and at a time when the mind is most finely strung, the presence of some superabundant acid in the stomach, dyspepsia, however produced, will mar its exquisite attunement, and prostrate the reason into gloomy hypochondriacism. The valiant man, under this poor sympathy, will become for the time a coward—the philosopher a fool. As our impressions, when awake, are twofold, so are they twofold when asleep; but there is this difference, that the senses being closed, or nearly closed, against their ingress, memory asserts her almost undivided reign, and the dream is of things gone by. The organic functions still go on, and the brain is liable to be affected by its sympathies or connexions with them. The dyspepsia, or the dyspnœa from affections of the heart, which produce in the waking individual hypochondriacism, or sensations of distress, give rise in the sleeper to impressions which his half-conscious mind cannot so properly appreciate, and hence the exaggerated nightmare and the frightful dream. Such a state has been well described by Scott, in his description of the anxious night spent by Roderick Dhu.

> " In fitful dreams the image rose
> Of varied perils and pains and woes;
> Now his steed founders in the brake:
> Now sinks his barge beneath the lake:
> Now, leader of a broken host,
> His banner falls, his honour's lost."

No disquisitions that we have ever read have offered a satisfactory solution of the immediate cause of sleep, or dreams. These are the ultimate facts that have ever baffled, and will ever baffle human reason, and speculations directed towards them are profitless waste of thought and time.

But when we carefully analyse phenomena, the legitimate task of philosophy, we think we discern, and that not very obscurely, some of the links in their production, though we know not the immediate and efficient agency.

The last part of this subject to which we shall advert, is Mr. Mayo's comparison of the brain in man and brutes. As we think Mr. M. has displayed some considerable fallacies, we will give his reasoning entire.

"Let us now turn to the physiological conclusions which are suggested by a comparison of the brains of vertebral animals of different orders with each other and with that of man.

Whenever our knowledge of any branch of natural philosophy is sufficient to enable us to study with success the uses of a part of the animal frame, we invariably discover the most exact adaptation of the physical structure to the office of the part. In the form and disposition of the bones, for instance, or in the structure of the eye, we find more and more occasion for wonder at the perfect art displayed, in proportion as we more deeply study mechanics and the nature and properties of light. It is impossible for us therefore to doubt, that in the brain there is the same exquisite fitness to the purposes for which it is designed. And as experiment and observation lead us to think, that the brain is the organ through which the mind influences and is influenced by the body, we naturally conclude that its whole structure has a direct and immediate relation to the endowments and workings of the mind. The composition of the brain is doubtless as exactly suited to the phenomena of thought and feeling, as the structure of the eye to the properties of light. What inquiry is likely to prove more interesting, than to trace the relation which exists between an improving mental nature and its appropriate bodily instrument?

It does not appear that an increase in the absolute weight of the brain confers a superiority in mental endowments. Were this the case, the intellects of the whale and of the elephant should excel the rational nature of man. Neither does the relative weight of the brain to the whole body appear the measure of mental superiority. The weight of the human brain is but $\frac{1}{35}$ of the frame; while that of a canary bird is $\frac{1}{14}$. Nor, in conjunction with parity of form and structure even, does this relation appear of any value. The eagle is probably as sagacious as the canary-bird; but the weight of its brain is but $\frac{1}{260}$ of its entire weight.

We may next inquire, whether an increasing number and complication in the parts of the brain is essentially connected with improved mental functions. The first instances which occur to the mind are in favour of the affirmative of this supposition. It may be inferred from their docility and surprising capability of receiving instruction, that birds have higher mental endowments than fish; and accordingly, in place of the nodules of the fishes' brain, which are scarcely more than tubercles to originate nerves, birds possess an ample cerebrum and cerebellum. But in pursuing this argument, if we compare, on the other hand, the brain of birds with those of alligators and tortoises, we find no striking difference or physical superiority in the former over the latter; yet in mental development the tortoise and alligator are probably much nearer to fish than to birds. The instantia crucis, however, upon this question, is found in the comparison of the brain of the cetaceous mammalia with the human brain on the one hand, and with that of fish on the opposite.

The cetaceous mammalia have brains which, besides being of large size, are nearly as complicated as those of human beings; they might therefore be expected, if the opinion which I am combating were true, to manifest a remarkable and distinguishing degree of sagacity. Endowed with a brain approaching nearly in complexity and relative size to that of man, the dolphin should resemble in his habits one of the transformed personages in eastern fable, who continued to betray under a brute disguise their human endowments. Something

there should be very marked in his deportment which should stamp his essential diversity from the fishes, in whose general mould he is cast. His habits too, not shunning human society, render him especially open to observation; and the class of men who have the constant opportunity of watching his gambols in the deep are famed for their credulity, and delight to believe in the mermaid, the sea-snake, and the craken. Yet the mariner sees nothing in the porpesse or the dolphin but a fish, nor distinguishes him, except by his unwieldy bulk, from the shoal of herrings he pursues. The dolphin shews, in truth, no sagacity or instinct above the carp, or the trout, or the salmon. It is probable even that the latter, which have but the poorest rudiment of a brain, greatly exceed him in cunning and sagacity.

I am afraid that the instance which I have last adduced, is sufficient to overthrow most of the received opinions respecting the relation of the size and shape and organization of the brain to mental development; nor is it easy to find a resting place for conjecture upon this subject.

Is there, we may ask, any ascertained relation between a single division of the enkephalon, and any class of mental affections? It is often asserted, that some ratio exists between the size of the cerebellum and the force of the sexual appetite: yet, how opposite to this conclusion are the most obvious facts. The cerebellum of frogs, which are remarkable for their salacity, is so small, that its existence has been disputed. Fish, on the other hand, have the cerebellum of great size. And in mammalia, in which the sense of smell certainly contributes principally to excite the sexual appetite, the olfactory nerve, which is of prodigious size, instead of having any visible connexion with the cerebellum, appears to be an actual production of the cerebrum.

Or can any relation be traced between the development of the brains of animals and the caste of their other organs? We naturally suspect that such may be found, when we observe, that animals so unlike in their habits (at least as far as regards their mode of progression) as the frog and the snake, have brains precisely similar. We are led to think, by such instances, that the formation of the brain may have a greater reference to the physical character of the general frame than to the mind. Yet the brain of the ornithorhyncus, as it is delineated by Meckel, resembles not the brains of reptiles and birds, to which by its generative organs the animal seems allied, but the brains of mammalia.

The brains of monkeys have a strong general resemblance to the human brain. This must surely refer to the resemblance of their physical organs to those of man, not to their sagacity: the dog should else have a brain shaped like that of the monkey.

It is a common opinion, that the front of the brain is the seat of the intellectual faculties: yet in monkeys and in man the back part of the brain is that which has the largest relative size. The sheep, on the other hand, has an ample front to its brain, a large intellectual region, according to the phrenological theory, whilst its instinct of attachment to its young has a poor locality in its moderate posterior cerebral lobe.

M. Magendie makes the curious remark, that the brains of adult human beings exceed those of aged persons fifteen per cent. in specific gravity.

Has nothing then been discovered to mark an essential superiority in the brain of man? The question must, I believe, be answered in the negative. No physical condition, distinguishing the human brain from that of animals, and therefore fitting it to co-operate with a rational soul, has as yet been ascertained, or even plausibly conjectured, to exist. We are as yet free to suppose, that a mental nature of a higher caste, may possibly work with materials as gross as those which are suited to the instincts and small sagacity of brutes; or that some delicate difference of organization, finer than we yet have the means of testing, and independent of the relative size and volume of the brain, may be the material cause, especially qualifying the human brain to be the seat of reason." 252.

Mr. Mayo proves too much, for if his arguments lead to any conclusion it is to this, that man's superior reason is not owing to his brain at all—a rather startling announcement. But let us examine Mr. Mayo's positions. Man's brain is not distinguished by its absolute weight, says he, because the brain of the whale and the elephant are heavier—nor by its relative weight, because that is but 1-35th of the weight of his frame, whilst the brain of the canary bird is 1-14th of the weight of its frame—nor by its complication, because the cetaceous mammalia have brains which are not only large, but *nearly* as complicated. Now before we deal more particularly with these statements, let us just employ analogically the same argument, and so display its *general* futility. We will suppose that the question is as to the physical superiority of man and animals. Mr. Mayo, we imagine, would say, that man is physically not superior to animals, and he would urge, that the nightingale has a more melodious voice, the eagle a keener eye, the hound a finer scent, many animals a quicker ear, many too a softer skin or a more alluring surface, the lion more strength, the antelope more agility, in short, he might shew that in almost every physical peculiarity some animal or other possessed the advantage. But what would be the straight-forward reply to such a line of argument? True, these creatures you have instanced excel the human being each in some particular, but is there any animal that possesses the *general* physical endowments that man does, is there one that combines so many qualities in so much perfection?

Mr. Mayo may select the particular instances he has done, with reference to cranial development, but we put it to Mr. Mayo's candour to declare whether the brain of any animal that he has examined, or that any other person has examined, will bear comparison for one instant with that of man, in *all* its qualities of size, arrangement, complication. Who that looks at a brute's brain is not instantly struck with the fact, that there is little more than pertains to the senses; at least, that the chief proportions of their brains are those which are connected with the nerves? Where do we see that immense superimposed mass of hemisphere, that would seem preposterously and uselessly placed in the human skull if it were not connected with human intellect? Mr. Mayo instances the brain of the sheep, as possessing an ample front, a large intellectual region. Mr. Mayo's sheep must be very different from any we have seen, or he would not venture to compare its dwarfish cerebrum, the development of which above the thalami appears contemptible, with the overpowering mass of human cerebral matter. Let any one unprejudiced person place the brain of the sheep and of the man side by side, and rise with impressions adverse to the connexion between cerebral and mental development, if he can.

Here we fear we must pause. It may appear singular that, after speaking in such terms of praise of Mr. Mayo's work, we should have criticised so freely. But in fact we have only selected points for criticism, and those of a confessedly debateable character. The great body of the work must pass unchallenged, though there are some doctrines advocated to which we cannot yield undivided assent, such for instance, as that of transudation in the living tissue. We conclude, however, by recommending the volume in the most cordial manner to the public, and especially to students. It is a work which does honour to the school from which it emanates. We trust that in the criticisms in which we have indulged, we have displayed no dogmatic

spirit. We are fully aware that the truth is not necessarily on our side, and that we are very likely to be wrong in the opinions we entertain. The public are the best judges of conflicting sentiments, and if the public think that Mr. Mayo's opinions on the points at issue are more correct than are ours, we shall bow very willingly to the decision.

VII.

A Treatise on the Urethra, and its Diseases, especially Stricture, and their Cure. By *Benjamin Phillips*, Author of a Series of Experiments made to demonstrate that Arteries may be obliterated without Ligature, Compression, or the Knife. 8vo. pp. 319, two Plates, London, 1832.

If we may judge from recent publications, the attention of surgeons is at present directed a good deal to the subject of stricture. Mr. Stafford has written on the division of stricture, Mr. Brodie has transformed his Lectures on the Diseases of the Urinary Organs into an octavo volume, and we have this brochure of Mr. Phillips before us. Our readers will see as we go on, whether our present author has anything peculiar to offer, and without further preface we shall plunge at once *in medias res*, and select what portions appear most fitting to develop Mr. Phillips' sentiments, or explain his practice.

The first chapter treats of the Anatomy of the Urethra. The only passage that we think it worth while to notice, is that relating to the direction of the canal, which our author, as will be seen, has endeavoured to ascertain.

"The words used by some authors of the present day, 'that the canal is straight, or almost straight,' having left much uncertainty in the minds of practitioners, I have determined here to endeavour to shew the exact direction of the canal, confident as I am that the knowledge will be found of much utility in practice. On six subjects, examined under ordinary circumstances, and in a healthy state, the rectum and bladder being carefully emptied of their contents, the level of the most depending part of the prostatic region of the urethra was found to vary from three to five lines below the level of the most depending portion of the vesical orifice of this canal. The level of the most depending portion of the membranous region averaged nearly nine lines below the most depending portion of the vesical orifice,—and the distance between the vesical orifice and the point of the triangular ligament through which the urethra passes was fourteen lines—that point being three lines inferior to the vesical orifice of the canal. From this admeasurement, it must be evident that, in the state of health, the last curvature is inconsiderable.

On two subjects, having hypertrophy of the prostate, which I had an opportunity of examining, though the bladder was much depressed in the pelvis, the level of the most depending portion of the prostatic region of the urethra was found from six to seven lines and a half below the level of the internal orifice of this canal. There can be no doubt that like variations would be frequently found if new and extended researches were made on the subject; but these observations

alone are sufficient to shew, that, in sounding, it is necessary at this point to elevate more or less the beak of the sound.

In children, the canal undoubtedly presents a greater curvature; for, in infants, the small capacity of the pelvis does not admit of the descent of the organs which at a later period it is destined to contain. As its development increases, these organs are more completely contained in the cavity of the pelvis, and the canal has then a tendency to approach to a straight form. One circumstance which tends to shew that the urethra is or may be made nearly straight without difficulty, is, that little pain is experienced by the introduction into the canal of a straight instrument: indeed, we find that even when curved instruments are employed, frequently the whole of the curved portion has been passed into the bladder—and that all that remains in the canal is straight." 20.

Certainly it is not difficult, under ordinary circumstances, to introduce a straight instrument into the bladder of either the living or the dead subject. The plan which we have found answer best is this: elongate the penis well upon the instrument and pass it steadily on till its point hitches in the bulb; then withdraw it for about half an inch or an inch, and again pass it forwards, taking care to keep the point elevated, when the sinus of the bulb is avoided, and the instrument enters the membranous part of the canal. The second chapter is devoted to the pathology of the Mucous Membranes, and it appears to us to treat a little too much de omnibus rebus. Neither is our author particularly clear on some occasions, as the following sentences will shew.

"By inflammation I understand that succession of phenomena occurring in a tissue, and produced by an irritation, of whatever kind it may be. They are super-excitation of the vascular system, succeeded by an enlargement of the vessels, and a certain stagnation of blood in their cavities. This congestion or semi-stagnation is produced as soon as the circulation (at first accelerated) begins to relent. Once produced, it may occur, that, by the force of impulsion which serves to produce it, the capillaries may be ruptured: there is then extravasation. At other times, this fluid is deposited in the substance of the tissue by a true exhalation; so that there may be, according to these two modes, extravasation of blood, or serum, fibrine, or pus. This infiltration, which is affected in the interstices of the tissue, adds to the irritation produced by the vascular congestion; it increases the sensibility, and produces a tensive pain.

This state, so complicated in appearance, termed inflammation, I reduce then to three morbid modifications—vascular super-excitation, vascular congestion, and interstitial infiltration. These are its elements, and they are narrowly connected the one with the other. This state is characterized principally by a redness; by an increase of temperature; by a tumefaction; and by an augmentation of the sensibility of the tissue. Redness, heat, pain, and swelling, such are the characters of inflammation." 31.

We must confess that the foregoing elimination of our author's ideas on Inflammation is not of the most satisfactory description, and he assumes rather more than a cautious reasoner would venture to do. For instance, it is not absolutely certain that in inflammation, super-excitation of the vascular system is succeeded by an enlargement of the vessels, and a certain stagnation of blood in their cavities. Neither do we see very clearly how a force of impulsion would produce stagnation, on the contrary we should rather conclude that, cæteris paribus, any increase of impulsion would rather tend to prevent it, unless there were some obstruction to impede the cur-

rent so impelled. We also think that our author deals rather too freely in general assertions, or rather enunciations of general principles or laws. He says, for example, that the pain accompanying inflammation of the mucous system, *never* acquires that intensity which it does in similar affections of cellular, serous, fibrous, or even osseous tissues. It is most true that inflammation of mucous membranes is not usually characterised by acute pain, and had Mr. Phillips contented himself with stating the general fact, none could have disputed it. But when he says that inflammation of mucous membranes never produce severe pain he evidently goes too far. There are few tortures greater than those excited by the presence of stone in an inflamed bladder, or by ulceration of the mucous membrane in the prostatic part of the urethra. We might attack several positions of Mr. Phillips, which seem to us to be far from impregnable, though very confidently held, but we will not occupy our readers' time with criticisms of this description.

Our author, after adverting to the pseudo-membranes formed by the mucous membrane in croup, &c. observes, with reference to the genito-urinary system—

"Although we have very little evidence to shew that pseudo-membranes are produced in the genito-urinary system, it is not probable that system is exempt from the affection. I am aware of only very few cases which establish the existence of pseudo-membranes in the genito-urinary system: one is cited in the *Journal Général de Medecine*, vol. 68, page 206, and was transmitted by M. Destrees, a physician at Vailly, to the Society of Medicine at Paris. In that case the individual who was affected with cystitis and intestinal inflammation expelled by stool a portion of false membrane, so extended as to alarm him, believing he had voided his intestines; he at the same time passed his urine with much pain, and with it a thick mucus mixed with considerable portions of membraniform concretions or pseudo-membrane." 41.

Mr. Phillips next describes the pathological conditions and effects of chronic inflammation. He notices the vegetations or excrescences sometimes, though rarely, observed. They appear to be a deposition from small vessels, and are surrounded by a tissue at first reddish and gelatiniform, but which becomes greyish, dense, and indurated, in proportion to the period of the continuance of the inflammation. Mr. Phillips directs attention to the small number of recorded instances, in which the effects of chronic inflammation of the urethra have been ascertained by inspection after death. The following is a brief summary of our author's opinion as to those effects, and their influence in occasioning contractions of the canal.

"I have now passed in review a certain number of changes accompanying or succeeding to inflammation, and which have a tendency to contract to a greater or less extent the diameter of the canal of the urethra.

The first is that change which occurs during the progress of acute inflammation of the mucous membrane, in which tumefaction or engorgement exists to so considerable an extent as to cause occasional retention of urine.

The second is that state of thickening of the mucous membrane alone, or accompanied by a similar affection of the submucous cellular tissue, which generally occurs as a consequence of chronic inflammation in the canal.

The third is produced by those vegetations, succeeding to a chronic inflammation of this tissue, which project into and necessarily lessen the diameter of the canal.

The fourth is that state of the canal where the inflammation has terminated in

an adhesion of its parietes, and in which a tolerably distinct septum, or valvular replication, is occasionally found. The mucous membrane, at the situation of these valves, appears reeved almost as if a thread were ran through its thickness and then tightly drawn. Morgagni describes the progress of the last change in the following manner: certain erosions of the membrane are replaced frequently by some slight excrescences, which, in contracting, present at first fibres, and these become more and more dense, and form at last white lines which project in the cavity. Laennec supposed these 'excrescences' to be false membranes, formed by a plastic exudation and supported sometimes by a large and prominent base. If, however, what I have already advanced with regard to pseudo-membranes be correct, this opinion can have no foundation." 50.

Mr. Phillips concludes this chapter by some reflections on the reproduction of mucous membrane. He cites Andral, Cruveilhier, &c. in support of the declaration that they are reproduced, and he instances the analogy of the membranes lining fistulous canals. The only appreciable difference between new and normal mucous membranes, is said to be the absence of follicles in the former.

The third chapter is dedicated to urethritis. There is little in it to which we could profitably direct attention, the whole being rather a compilation of the jarring opinions of other men, than an exposition of original experiments or original ideas on the part of Mr. Phillips. We shall merely allude to a few insulated points. Those who have seen much of venereal practice, must have occasionally been consulted by patients who complain only of pain in the course of the urethra. As Mr. Phillips observes, this most frequently succeeds inflammation accompanied with discharge. We have two patients under our care at the present time affected in this manner. The pain is sometimes severe, aggravated on the passage of the urine, and attended with gleety discharge. This affection is rare, usually of long duration, and proves a source of great annoyance to the patient. Mr. Phillips relates the following case, which is not devoid of practical interest.

"I have seen only one case of this affection. A man of 28, in good health, who had never before suffered from any affection of the sexual organs, had, a year previous to my seeing him, an urethritis, which was discovered on the tenth day after connexion, and which, having existed eight days, terminated spontaneously. From that period he had experienced in the urethra extremely acute pain, unaccompanied by discharge. Rigid diet and a freedom from exercise of a fatiguing kind caused the disease to disappear; but when his exercise became fatiguing, or his diet irregular, the pain returned with violence, especially during the emission of urine or semen. His general health continued good; and in some months after the discharge had disappeared, he had connexion with two or three females, to whom he did not communicate the affection. The penis presented no appreciable alteration; a sound of large size was admitted without difficulty; the jet of urine was as large as usual. He had been directed to rub, on the inferior surface of the penis along the canal of the urethra, mercurial ointment, in combination with camphor, extract of belladonna, and hydriodate of potash: opium and mercury were administered internally without success. After much anxious reflection, we determined to produce a discharge from the urethra by introducing a bougie smeared with virus, obtained from a patient suffering from contagious urethritis. It was however deemed prudent to endeavour first to produce a discharge by simply irritating the canal: accordingly, an irritating injection was introduced into the urethra. The injection produced a profuse discharge, which terminated in a few days, and with it the pain which had produced so much anxiety and distress." 86.

In the patients under our own care, to whom we have already alluded, we have employed counter-irritation, applied to the inferior surface of the penis, combined with the use of alkaline aperients and opium. We must own that, hitherto, we have derived little benefit from these means. In both these patients there is gleety discharge, and we feel strong doubts as to the propriety of Mr. Phillips' idea of re-inoculating the patient with gonorrhœa. The pain is probably kept up by some source of irritation in the urethra, and we should imagine, à priori, that steady persistance in counter-irritation, and the avoidance of all causes likely to aggravate the complaint, would prove the best plan of treatment in the majority of cases. But such notions being rather conjectural than actually supported by decisive facts, we would not attach more importance to them than they merit.

Mr. Phillips, in discussing the treatment of that very obstinate affection, chronic urethral discharge, or gleet, adverts to M. Lallemand's employment of the nitrate of silver in substance. The following short case will illustrate this statement.

"M. A. retained, during a long period, a chronic discharge from the urethra, experiencing at the same time, as a constant symptom, pain and uneasiness in the fossa navicularis. He was treated, during a year, with injections, the composition of which was varied; without deriving any benefit from their administration. The surgeon under whose care he had placed himself applied the nitrate of silver eighteen or twenty times to the fossa navicularis, without obtaining any alteration of the symptoms. Pasquier was consulted, and felt assured of the existence of an ulceration under the symphisis of the pubis. He made a single application of the nitrate of silver to this portion of the canal, and in eight days the discharge had entirely ceased." 109.

It will be observed that the application of caustic is not limited to the anterior portion of the canal, and it cannot be denied that in long-continued urethral discharges the posterior portion is affected. Whether the direct application of lunar caustic is likely to succeed much better than the long train of injections, bougies, cubebs, copaiba, lytta, turpentine, and the many other drugs and applications that have been and daily are directed against gleet, we will not pretend to determine. We cannot but fear that this mode of treatment will more frequently than the others induce inflammation of the bladder or the testicle, those pleasant corollaries to gonorrhœa and the remedies employed for it. M. Lallemand's statement of the effects of the application of caustic are not very explicit.

"The inflammation produced by cauterization may be inefficient; it will then be necessary to repeat the application. It may be too energetic; and should then be moderated by ordinary means. Lallemand says that, far from seeking to dissimulate with regard to the incoveniences of this remedy, he would endeavour to exaggerate them, in order that they may be avoided by the suggestion of the necessary precautions. He states that, nine times in ten, he has cured, by cauterization, discharges of long standing, which have resisted treatment the most rational and varied. There exists this difference between cauterization and other remedies—that its success is more durable, because it acts directly on the diseased tissue, and changes its organization." 114.

But we must quit the subject of gonorrhœa; and we confess that our author's remarks upon it are neither calculated to render our notions on the subject more definite, nor our practice more systematic. The next

chapter is on catheterism. Some of our readers may not be aware of the antiquity of instruments for exploring the urethra. Troja and Lassus state that the sound with two curvatures, the invention of which has been referred to Petit, had been in use two thousand years before his time by the Greek surgeons. Lassus had seen in the Museum of Portici, near Naples, this kind of sound, which had been discovered in the ruins of Pompeii; it, as well as all the surgical instruments of the Greeks, was of bronze; it had the same form, the same length, and the same diameter as that of Petit, and differed only in this, that, in place of two lateral holes, near its extremity, it had only one, which was on the concave portion of the sound, and near the extremity. Paulus Equieta, who lived in the early portion of the seventh century, in speaking of diseases of the urethra and of the treatment they require, says—that when ulcerations exist in the urethra, we should introduce into the canal a quill, or a tent made of linen, and covered with some desiccative ointment. The following remarks on the introduction of instruments along the urethra into the bladder are practically very good.

"In introducing an instrument into the urethra or bladder, it is necessary to recollect that the two opposed parietes of the urethra—the superior and inferior—differ singularly as to their configuration, and that we cannot indifferently follow the one or the other with the beak of an instrument. The inferior portion is yielding; for neither along the penis, nor at the height of the scrotum, nor beneath the pubic symphisis, is it supported by any thing solid. In gliding along the canal, the beak of the sound may easily enough push before it the lining membrane of the urethra; for along its surface we meet, in old men, inflections of the membrane (resulting from its flaccidity), which occasionally have a tendency to arrest the progress of the instrument. Those inflections are, however, principally longitudinal, and they cannot arrest the passage of an instrument. Some orifices of mucous follicles, and among others those of the glands of Cowper, are, according to general opinion, susceptible of receiving and arresting the beak of a sound, especially if it be of a small size. Lastly, at the level of the bulb and in front of the contour of the neck of the bladder, on the sides of the verumontanum, there exists on the inferior surface marked depressions, the orifices of which are presented towards the external orifice of the urethra; against these the beak of the sound passes, and is by them occasionally prevented from making further progress.

If we examine, by means of dissections (attentively made) false passages formed in the urethra, during life, or after death, in subjects submitted to catheterism, we find that they are produced by the rupture of the inferior parietes of this canal, and that the greater number of those passages exist either at the situation of the depression I have pointed out or at the bulb. The disposition of the superior part of the urethra is infinitely more favourable as a conductor for instruments in their passage along the canal than the inferior. Sustained in front by the corpora cavernosa, and behind by the pubic symphisis, it presents great firmness; and we find only longitudinal replications, which are removed by the distension produced by the instrument; and no obstacle is here presented to its progress: no depression exists here under ordinary circumstances; there is no projection of the prostrate into this portion of the tube; neither do we find many follicles, either isolated or grouped; nor any considerable orifice. I limit myself here to these succinct indications concerning the anatomical disposition of the urethra, having entered largely into detail when describing the anatomy of this organ." 130.

It is impossible for any man to introduce instruments safely and successfully, unless he keep the point of the instrument directed towards the supe-

rior rather than the inferior wall of the urethra; and it is owing to ignorance or neglect of this precaution, that we see catheters or sounds passed in the bungling and the mischievous manner in which they frequently are. The following quotation will shew that straight instruments have no better claim than have curved to be entitled a modern invention.

"The use of straight instruments is not new in surgery; for they have been discovered in the ruins of Herculaneum and Pompeii. Khalaf-Ebn-Abbas-Abu'l-Kasem, generally known by the name of Albucasis, who died in 1122, and who wrote a work on the operations of surgery, which is one of the most precious relics of the age in which he lived, gives a representation of a straight instrument; but there are no directions for its use. But it is evident that they were in use in his time; and as there exists so much doubt as to Albucasis having written another work, in which allusion is made to this instrument, we may still more confidently support the opinion. Friend has, I think, proved that the work which has commonly been attributed to Alzaharavius, who is supposed to be a different person from Albucasis, was only a part of a great work of the latter. Lieutaud, who lived in the middle of the eighteenth century, expresses himself thus:—'But we may avoid this operation (puncture of the bladder), always dangerous, and often fruitless, because it does not remove the cause of the disease, in providing ourselves with a straight sound, solid or hollowed. I can assert, from the knowledge I have of these parts, healthy or diseased, that there is not any case, if we exempt that of stone existing in this canal, which can prevent a straight sound; conducted by a hand a little practised, from entering into the bladder.' Since that period, they have been used by men of distinguished character, and have acquired an ephemeral reputation." 138.

Our author's cautions against the employment of force in the introduction of instruments, whether straight or curved, are judicious. We now pass to the second part of the work, which is more particularly devoted to the consideration of stricture. The first chapter of this part is on the definition, origin, classification, situation, and symptoms of stricture. Those who are curious to learn our author's ideas on this subject must consult the work itself. We do not see anything peculiar or striking in them. The only passage to which we shall refer is one upon the seat of stricture. In a hundred and seventy-three cases which our author has selected, the disease was situated at the following distances from the orifice of the urethra. In nine the distance did not exceed an inch, in eight from one to two inches, in thirteen from two to three inches, in eleven from three to four inches, in ninety-eight from four to five inches and a half, in forty from five and a half to six and a half inches, in ten from six inches and a half to seven and a half. Mr. Phillips justly remarks, that there is a considerable difference in the length of the anterior part of the canal in different individuals, and that, although the distance from the orifice may vary, the seat of the stricture may remain the same or nearly so. Mr. P. too thinks that in the cases alluded to above, the disease, when at a greater distance from the orifice than four inches and a half, was seated either in the neighbourhood of the curvature of the urethra, or between that point and the prostatic portion of the canal, and that the difference in the admeasurement was dependent on the length of the organ.

The second chapter contains a history of the treatment of stricture. Our author observes that there are two leading principles of treatment commonly acted on—dilatation of the strictured canal, and destruction of the stricture.

The latter is ordinarily effected by cauterization, but incision is sometimes required. We are almost tempted to extract a historical notice of bougies and escharotics, as it may amuse those who take an interest in observing the progressive improvement of all useful inventions. We must, however, pass on to the consideration of the treatment. After stating that bougies have the effect of dilating, compressing, and irritating the canal, Mr. Phillips proceeds to urge the following objections to the treatment by dilatation.

"When most exempt from accident, the treatment by bougie is long, occupying three, six, nine, or even twelve months, and requires great precaution on the part of the practitioner and much patience and resignation on the part of the sufferer. During the time occupied in the employment of the bougie, the patient is frequently required to keep the instrument in the urethra through the night, and sometimes day and night; he is obliged to withdraw the bougie whenever he wishes to urine, and afterwards to reintroduce it; and in many cases he is prohibited from taking the slightest exercise. The necessity of confinement and a repose more or less absolute, is a serious inconvenience, especially if the patient be old, feeble, or irritable; and the presence of the bougie produces frequent interruption to, if not total loss of, sleep. The necessity of removing the bougie to urine is also in some cases an inconvenience of the highest magnitude, because much difficulty is frequently experienced in the reintroduction of the instrument. The treatment by bougies, too, implies the possibility of passing the instrument through the stricture, which is not always practicable; for, after placing the bougie in contact with the stricture and using gentle pressure, we are unable to pass it, either from the orifice of the stricture not being in the axis of the canal, or, if situated in the centre of the canal, being so very narrow, that the bougie is unable to penetrate the obstruction. It frequently occurs that, after having passed through one obstacle, we meet a second, a third, or a fourth, which successively interrupts the introduction of the instrument, and, should it finally obstruct its passage, renders any progress which may have been made ineffectual. After having succeeded in introducing a bougie into the bladder, it not unfrequently happens, when we wish the next day to repeat the introduction, that we find, from the irritation of the previous operation, we are unable to effect our object." 181.

Mr. P. remarks in addition that the bougie is frequently bent back upon itself—that sometimes the irritability of the urethra is so great that the patient cannot support its presence in the canal for five minutes—that if it be allowed to remain for a night, or even for a much less period of time in that portion of the canal which remains healthy, it may give rise to inflammation and stricture—that if there be more than one obstacle and the bougie has dilated the first, it is necessary to employ a smaller bougie for the next, when the former stricture has a tendency to relapse—and, finally, that in the greater number of cases there is a recurrence of the disease. Mr. Phillips observes in conclusion,—

"If to these observations I add, what I assume has been already proved, that it is in the early stages of the disease only, we can hope (even with all the precautions which have been recommended) to succeed by the use of bougies, the reader will be astonished that dilatation is so generally employed, and will expect the exclusive advocates of that treatment to cling with less pertinacity to their favourite remedy." 188.

And further on he adds,—

"I have now passed in review the methods of treating strictures by bougies

and by sounds, and have, I submit, established their inapplicability in the vast majority of cases. I have shewn, that by far the greater number of strictures are an effect of induration existing in the parietes of the canal—that this induration can only be removed by dilating bodies, through the medium of absorption—that, if induration has long existed, absorption can no longer be performed—and that bougies or sounds can therefore succeed in the earlier stages of the disease only; whilst it is notorious, that application for medical assistance is rarely made until the disease has acquired a formidable character. Absorption being, then, available for the cure of strictures in a very early stage of the disease only, and compression being, as I apprehend, wholly inefficient for the removal of the obstruction, there remains but one mode by which, in the case of organic stricture, we can restore the canal to its original capacity, and that mode is destruction of the stricture; and this is effected by means of a caustic substance or a cutting instrument." 193.

We have no hesitation in saying, and we think most practical surgeons will agree with us, that the foregoing is a most exaggerated picture of the difficulties, and a most imperfect and unjust estimate of the success of the treatment by dilatation. So far from thinking it inapplicable in the vast majority of cases, we know, from experience, that it is applicable in that vast majority; and this statement convinces us that Mr. Phillips is no very practical man. We have seen and treated many cases of stricture; we have witnessed the treatment of very many at our hospitals; and in very few instances indeed has it been impossible to introduce an instrument into the bladder. It is true that this was not always done at the first attempt, but by gentle perseverance it was effected in almost every instance. An instrument being introduced, those difficulties that form so alarming a picture in Mr. Phillips' pages have never presented themselves to or been observed by us. By a gradual increase of size in the instrument the stricture was steadily and effectually dilated, without risk, and comparatively speaking, with little pain. Mr. Phillips observes that the disease is not permanently cured. It certainly is not; but where is the great inconvenience of a patient's introducing an instrument for himself, once in the week or the fortnight? We do not find that patients regard this necessity as one of intolerable hardship. But in point of fact this tendency to relapse is observed after the cauterizing and incising plan of treatment, as well as after that by dilatation. Whatever the advocates of the caustic, or the stilette may assert, the public may be assured that this is the truth. And after all, when their modes of procedure are scrutinized, it will be found that they really employ dilatation in their procedures, and affect the chief good by its means. The third chapter is on the employment of caustic. The gist of all our author's reasonings and arguments is to shew that caustic was not and could not be successful as formerly employed by Hunter and Home, because it was merely directed against the anterior surface of the stricture, but that when directed, as he recommends it to be, from within outwards, the objections vanish or are much diminished, and the benefits are vastly increased. We shall not describe Mr. Phillips' mode of applying the caustic, as in fact he gives no systematic description of his manipulations; but we may state that he first employs what he calls his model bougie to take an exact cast of the stricture, and then introduces the caustic by means of a canula or *porte-caustic*. We are induced to waive any further attempt at description, because in the number of this Journal for

July 1832, we gave a very full account of the procedure and apparatus of M. Ducamp, and it appears to us that Mr. Phillips' apparatus is not merely an imitation of that gentleman's, but is actually the thing itself. So far as we can see, there is no acknowledgment of this plagiarism, and we think it too bad that a gentleman should write a work of three hundred pages, purporting to be an original Treatise on Stricture, and passed upon the public as such, when the very marrow and essence of it, that which affects to recommend a peculiar practice, is little more than a translation. Novelty we do not at this time of day expect, but surely it is not right to adopt the inventions of another without acknowledgment, or with one so ambiguous as not to deserve the denomination. We are sorry to be compelled to make these reflections, but we should not do our duty as journalists did we not denounce such open appropriation of other men's ideas. That this is no idle accusation will, we think, be too evident from the comparison of the following descriptive passages. The first is Mr. Phillips' description of this "model sound."

"FIG. 1.—The model sound. It is formed as follows: we take a hollow bougie; through this we draw, as firmly as possible, a mesh of cotton; when it has arrived near the extremity, we cut off the cotton which has been drawn through, leaving about half an inch projecting beyond the bougie; this is dipped into a composition formed of equal parts of *bees' wax, diachylon, and shoemakers' wax,* is allowed to cool, and is then rolled between two pieces of wood or stone until it becomes in diameter nearly uniform with the other portion of the bougie." 318.

Contrast this with the description of M. Ducamp's "exploring catheter," in the Number of this Journal to which we have already alluded. It will be found at page 50. M. Ducamp observes that, to take an impression of the stricture, he uses what he calls an exploring catheter, which he then proceeds to describe.

"I have catheters of the Nos. 8, 9, and 10, open at both ends, and marked with the divisions of the foot; the anterior opening of these instruments must be about half the size of the other; I take a bit of sewing silk, and having tied several knots in it, and dipped them in melted wax, I round off the wax in the manner represented in fig. 7, plate I. By means of a bit of edging I pass the silk into the catheter, entering at the larger opening; when it has reached the other opening, the bulb formed by the knots covered with wax is detained, while the silk passes on and forms at the extremity of the catheter, a pencil of fine downy threads, both soft and strong; or else I pass the bit of flat silk through four little holes situated near the end of the instrument, and uniting them together in a knot, I afterwards spread them out in the form of a pencil. This pencil is soaked in a mixture composed of equal parts of yellow wax, diachylon, shoe-maker's wax, and resin; I take a sufficient quantity of it to enable it when rounded off to equal the bulk of the catheter. I let this *moulding wax* grow cold, and softening it between my fingers, roll it upon some hard polished surface. I cut this kind of bougie added to the gum-elastic canula, at about two lines from the extremity of the latter, and round off the wax like the end of a catheter. By this arrangement, the moulding wax, mingled with the filaments of silk, becomes incorporated with them, and cannot fall off."

It must be owned that the English model sound is a monstrously close copy of the French exploring catheter. The epithets might be reversed with some propriety, M. Ducamp having the fairest title to the model, and

Mr. Phillips to the explorer. The caustic apparatus is a copy of the same closeness, but the length of M. Ducamp's description, and the brevity of Mr. Phillips' prevent us from placing side by side this—

Counterfeit presentment of two brothers.

If, however, our readers will take the trouble to collate and compare M. Ducamp's work, or our notice of it, and Mr. Phillips', we fear they will rise from the perusal of the latter with sentiments as unfavourable to the latter gentleman's originality, as we are compelled to do.

There is one point to which we will advert a little in detail. Mr. Phillips denies that contraction follows cauterization, and on this he mainly grounds his advocacy of the cauterizing method.

"The arguments of the adversaries of the operation rest on a small number of examples of consecutive contraction, and on a supposed analogy which they seek to establish between it and other diseases. They have compared the destruction of stricture by caustic to the ablation of a part of the skin and common integuments, and the cauterized surface of the canal to a wound with loss of substance. It is by no means difficult to shew the inapplicability of this illustration :—to make the cases analogous, they must establish, that wounds of the skin, with loss of substance, and contused wounds followed by eschars, are similar to those solutions of the continuity of the canal which are consequent upon the application of caustic. But as the majority of strictures is produced by local indurations of the parietes of the canal, we may with more truth compare them to indurations developed immediately beneath or in the substance of the skin. Instead, however of comparing strictures to any other affection, we shall be more advantageously employed in watching carefully the progress of the disease and the effects of the remedy we employ. If, by affirming the existence of consecutive contraction after the skilful application of caustic, the adversaries of cauterization contend that such contraction ordinarily occurs, their deductions are, I believe, unsupported by experience; and, as far as my observations have yet proceeded, it has not been found that the destruction of stricture by caustic, properly applied, has been succeeded by any disposition in the canal to contract anew. It is true that an extreme case may be occasionally presented; but it would be as absurd to adopt our general treatment for extreme cases as it would be to take the exception for the rule.

In the case of stricture produced by induration, caustic destroys the morbid protuberance, which generally yields easily to its use; and if we limit its action to the induration which projects into the interior of the canal, and do not destroy the subjacent healthy tissue, the parietes of the canal are preserved, and a healthy surface will be presented. There will be here no granulations produced, since we shall merely remove a morbid tissue; and a thin cicatrix may cover the cauterized surface without consecutive contraction. A similar effect occurs every day in superficial burns, where the fibrous tissue has not been destroyed. After actual loss of substance, unless suppuration be really established, no fibrous tissue is generated, and no consecutive contraction occurs. The analogy on which the adversaries of cauterization have relied is not, then, exact, except in a very few strictures in which an actual loss of the healthy tissue is produced, and is succeeded by a secretion of true pus, and the development of a fibrous cicatrix. But it is stated, as an incontrovertible position, that the canal contracts by little and little after the complete destruction of ordinary strictures, and that these consecutive strictures are even much more difficult to cure than those which have not been cauterized. I am far from wishing to dispute facts asserted by authors of great respectability; but, if we examine those cases which have been sufficiently described, we shall be convinced, from the manner in

which the caustic has been applied, from the pains which have been experienced by the patient, from the (often incredible) number of applications which have been made, that false passages were formed, and that the remedy had acted upon the healthy portion and destroyed the healthy mucous membrane, probably in its entire thickness." 211.

It will be observed that Mr. Phillips denies the analogy between contraction after loss of substance, and the state of parts produced by the application of caustic. Where the mucous membrane is destroyed by the caustic there is loss of substance, and we contend that where this membrane is quite destroyed, as for instance in dysenteric ulceration of the large intestine, there is consequent contraction. But Mr. Phillips implies that in very many instances the mucous membrane is not destroyed. Now, in cases of old stricture, in ordinary cases indeed of stricture, of any degree of severity, the thickening, so far as we have examined the parts, has not been in the mucous tissue itself, but in the cellular, immediately external to it, or in the fibrous tissue external to that. If we look at contractions of other tubes lined by mucous membranes, we find the same fact, the contraction not depending on the thickening of the mucous tissue itself, but of the tissue or tissues external to it. We therefore contend that, in the great majority of cases, if caustics be applied from within outwards so as to destroy the thickening which commonly produces stricture, it can destroy it only by first destroying the mucous membrane that is placed between them.

But we doubt whether the destruction of the stricture be so simple a matter as Mr. Phillips imagines. One would think, from reading his description of the process, that it resembled very closely the planing of a piece of wood, when, the superabundant material being removed, the parts are of the desired figure and dimensions. Mr. Phillips must recollect that the caustic acts by producing an eschar, that the eschar is thrown off by inflammation, and that so long as his caustics are employed, a certain degree of inflammation must exist. Now, as chronic inflammation produced the thickening and the stricture in the first instance, there is no good reason why the inflammation excited artificially should be just what is required and no more, should be just sufficient to remove the thickening, but not adequate to perpetuate or regenerate it.

Analogies are, so far as we can understand them, against the employment of caustic. If we wish to produce contraction in a tube, we usually employ caustic—if there be an artificial opening we produce eschars, in order that the subsequent contraction may close it. The induration and contraction that follow burns are often the consequences of chronic inflammation remaining after the cicatrization of the burn, rather than of the burn itself. But we ask if any surgeon would expect to effect the reduction of that thickening by touching it every two or three days with caustic.

The conclusion then to which we are led to arrive is this, and, after all, it is more founded on facts than on reasonings. In the overpowering majority of *all* cases, in ninety-nine out of the hundred, dilatation, if practised by a dexterous person, is sufficient to enlarge the canal in an adequate manner, is attended with less pain, fewer inconveniences, and fewer risks, than any other method, and is only subject to the objection, to which we, in our consciences, believe all other methods are open also, of not proving a perma-

nent cure. The patient must make up his mind to the passage of an instrument occasionally for many years, if not for the remainder of his life. This is an alternative to which we find patients submit very willingly, and is much more exclaimed against by those who advocate other modes of treatment, than by those who have to submit to it.

With respect to cauterization, we are confident that it is not necessary in ordinary cases; and we doubt its superior celerity or permanency of good, and its equal safety, in the greater number of severe cases. By the method of applying it from within outwards, it is first necessary to get an instrument into or through the stricture, and if that be effected, the worst of the difficulty is vanquished.

Experience, however, is the great test of opposing modes of treatment. Mr. Phillips says experience is in his favour, and brings forward cases to support him. We know not how it is; but it always happens that, whatever be the drug or the operation vaunted, there is never a lack of facts in its favour. We will venture to affirm that Goss and Co. have as many cases, and apt ones, too, as would be necessary to establish any orthodoxy or heterodoxy whatever. Nay, we will allow, and we do it in perfect sincerity, that these facts are not false ones. The majority of cases do well under opposite methods of treatment, provided that they be directed with moderate judgment. There is no difficulty, then, in procuring cases, which, to the public, may appear satisfactory evidence, but to those who have much experience, or much caution, have by no means so imposing a character. We venture, then, to say, in reference to the present subject, that we believe that the experience of surgeons in the best practice in this country is in favour of dilatation. We do not bring forward their evidence *against* Mr. Phillips' or M. Ducamp's method of cauterization, because it will be said that the latter has not been sufficiently tried. We admit most fully and freely the validity of this objection. But we do bring forward their experience, and we do it with the utmost confidence, *in favour* of dilatation; we protest, in their name, against the character which the advocates of cauterization give it; and as their advocacy of the latter is mainly founded on their depreciation of the former, it follows of course that if that depreciation be exorbitant, the grounds for their recommendation of caustic are, *pro tanto*, fallacious.

Whilst we have thus expressed our opinions on this subject, we by no means wish to preclude investigation or experiment. Knowledge should not, cannot be stationary, and all disputes of this description are calculated to elicit truth, and promote the ends of science. But we find fault with Mr. Phillips for not acknowledging more openly and more explicitly the amount which he owes to M. Ducamp; and if a new practice is to be advocated or introduced, let its true owner, at all events, have the merit of it.

Mr. Phillips makes a few remarks upon incision, and with these we must close this notice, already too extended. He objects to Mr. Stafford's instrument, because he considers its employment attended with risk. We share his sentiments on this occasion, and we must say that we think the "lancetted stilette" either unnecessary or dangerous. We are sure that the more dexterous a surgeon is, the fewer will be the occasions on which he will cry out, like weak politicians, for force. The punctures of the bladder, and caustics, and cuttings are, in too many instances, but a clumsy apology for more clumsy manipulation. Mr. Phillips, however, has an instrument of

his own, although he condemns Mr. Stafford's. The following is a brief account of it.

"In those cases where the stricture is of a valvular kind, where it retreats before the bougie, and where, from this circumstance and its trifling extent, some uncertainty would attend any attempt to cauterize it, the cutting instrument I have invented may be employed with the most complete success. Where the induration has become so excessive that the indurated matter acquires almost a horny texture, and where the extent of surface which it occupies is inconsiderable, and, lastly, when any circumstance renders it necessary that the stricture should be very rapidly destroyed, in all these cases I do not hesitate in recommending the employment of this instrument. By the operation which I have introduced, the obstacle is instantly removed, after which an elastic catheter is passed into the bladder, for the purpose of protecting the incised portion of the canal from the irritation which would be produced, by the escape of the urine, during the evacuation of the contents of the bladder. The instrument which I have constructed for the purpose is described in the Appendix, where a representation thereof is given. It presents a circular cutting edge, is introduced into the urethra in a canula, and when the canula is in contact with the stricture, a probe or stilet, situated in the centre of the cutting portion, is gently introduced into the orifice of the stricture, and serves to maintain the instrument in the proper position in the canal. The cutting instrument is then advanced, placed in contact with and pressed against the stricture, a circular motion being at the same time given to it, similar to that given to a trephine, and in two or three moments the stricture is removed and the canal free. The operation may be performed with much facility, is wholly unattended by danger, and the pain is not much more considerable than that which accompanies the application of caustic." 222.

Mr. Phillips speaks doubtingly of the employment of incision, and remarks that he "cannot conceal from himself the conviction, that much dexterity and long experience in the use of the instrument are necessary." We suspect that, with much dexterity and long experience, neither this nor any other cutting instrument will be found necessary.

We would wish to state most explicitly, that we do not condemn indiscriminately caustic or incision; on the contrary, there are cases in which either may be advantageous. But we do believe that those cases are the exceptions, not the rule; and it is of making either the staple treatment of stricture that we altogether disapprove. What the cases are to which caustic or incision is applicable, it is not for us at present to enquire. In conclusion, we beg to observe that in the criticisms we have employed, we have intended nothing personally offensive to Mr. Phillips. We have taken the liberty of examining his doctrines, and the judicious part of the public must arbitrate between us.

VIII.

THE BLACK DEATH IN THE FOURTEENTH CENTURY. From the German of *J. F. C. Hecker*, M.D. &c. Translated by *B. G. Babington*, M.D. 12mo. pp. 205, Schloss, 1833.

THE translator observes that one and an important motive for laying this narrative before the English public is, that by comparing the sufferings of past ages with those of our own time, we may be made sensible how lightly the chastening hand of Providence has fallen on the present generation, and how much reason, therefore, we have to feel grateful for the mercy shewn us. This is a worthy and a Christian motive, and will, we have no doubt, be properly appreciated. We are induced to notice the little work for a reason more mundane, more tainted with human interests and human learning; to shew how, under Providence, civilization protects man from those terrific visitations of disease, which, in earlier ages, were characterized alike by ferocity and frequency, and whose returns were looked for with almost as much regularity as that of the seasons. When we read of a pestilence which swept away one quarter of the population of the old world, in the short space of four years, we read of that which reason tells, or seems to tell, us will not again occur, unless the Almighty inflict it as a special evidence of his wrath, or the circumstances of the world lapse back into the foul and unwholesome condition of the middle ages. We confess, then, that we do not entertain the alarm which some experience or affect to shew at the prospect of coming or of future plagues. Restore London to the condition in which it was antecedently to the great fire, or to the condition in which Europe was at the time of the black death, and then, indeed, we will join them in their bodings, and participate in their anxiety. But, until that is done, we must persist in thinking of approaching plagues and approaching dangers as we thought of the approaching cholera, that if they do visit this happy isle, they will come shorn of their most terrific features, and wither before the influence of cleanliness, comfort, a wholesome diet, and a salubrious atmosphere.

Many of our readers may be curious to learn what the black death of the fourteenth century was. The fictitious horrors of Defoe melt into nothingness when compared with its realities, and the reader of the narrative of its destructive progress, feels compelled to suspect that much exaggeration must be mixed with the details. We shall endeavour to give a short but connected account of this fearful scourge. Not pursuing the order which Dr. Hecker and his translator have adopted, we shall first describe its origin and progress.

It first appeared in China; but its exact nature is unknown. From China it passed to the western countries of Asia, where it shewed itself as the Oriental plague, with inflammation of the lungs. It was thought to be carried to Constantinople, then the seat of the Eastern Empire, and the centre of commerce between the East and West, from the Northern coast of the Black Sea, after it had depopulated the countries between those routes of commerce.

"It appeared as early as 1347, in Cyprus, Sicily, Marseilles and some of the seaports of Italy. The remaining islands of the Mediterranean, particularly Sar-

dinia, Corsica and Majorca, were visited in succession. Foci of contagion existed also in full activity along the whole southern coast of Europe; when, in January, 1348, the plague appeared in Avignon,* and in other cities in the south of France and north of Italy, as well as in Spain.

The precise days of its eruption in the individual towns, are no longer to be ascertained; but it was not simultaneous: for in Florence, the disease appeared in the beginning of April;† in Cesena, the 1st of June;‡ and place after place was attacked throughout the whole year; so that the plague, after it had passed through the whole of France and Germany, where, however, it did not make its ravages until the following year, did not break out till August, in England; where it advanced so gradually, that a period of three months elapsed before it reached London.‖ The Northern Kingdoms were attacked by it in 1349. Sweden, indeed, not until November of that year: almost two years after its eruption in Avignon.§ Poland received the plague in 1349, probably from Germany,¶ if not from the northern countries; but in Russia, it did not make its appearance until 1351, more than three years after it had broken out in Constantinople. Instead of advancing in a north-westerly direction from Tauris and from the Caspian Sea, it had thus made the great circuit of the Black Sea, by way of Constantinople, Southern and Central Europe, England, the Northern Kingdoms and Poland, before it reached the Russian territories; a phenomenon which has not again occurred with respect to more recent pestilences originating in Asia." 52.

It would seem that unusual phenomena, violent convulsions of the earth, and unnatural and unwholesome conditions of the atmosphere, were observed before the outbreak and during the continuance of this black death. We have little doubt that many of these reputed facts are but idle tales and bold impostures, the offspring of knavery, terror, or credulity. Yet, making every allowance for the operation of these causes, it must be owned that there is still a mass of accredited and probable facts, which go to prove that some great atmospheric or terrestrial agencies were at work, contaminating all nature, and fraught with destruction to man.

"The series of these great events began in the year 1333, fifteen years before the plague broke out in Europe: they first appeared in China. Here a parching drought, accompanied by famine, commenced in a tract of country watered by the rivers Kiang and Hoai. This was followed by such violent torrents of rain, in and about Kingsai, at that time the capital of the Empire, that, according to tradition, more than 400,000 people perished in the floods. Finally, the mountain Tsincheo fell in, and vast clefts were formed in the earth. In the succeeding year (1334), passing over fabulous traditions, the neighbourhood of Canton was visited by inundations; whilst in Tche, after an unexampled drought, a plague arose, which is said to have carried off about 5,000,000 of people. A few months afterwards an earthquake followed, at and near Kingsai; and subsequent to the falling in of the mountains of Ki-ming-chan, a lake was formed of more than a hundred leagues in circumference, where, again, thousands found their grave. In Houkouang and Ho-han, a drought prevailed for five months; and innumerable

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* *Guid. Cauliac*, Loc. cit.

† *Matt. Villani*, Istorie, in *Muratori*, T. XIV. p. 14.

‡ Annal. Caesenat, *Ibid.* p. 1179.

‖ *Barnes.* Loc. cit.

§ *Olof Dalin's*, Svea-Rikes Historie, III. vol. *Stockholm*, 1747—61, 4. Vol. II. C. 12, p. 496.

¶ *Dlugoss*, Histor. Polon. L. IX. p. 1086, T. I. *Lips.* 1711, fol.

swarms of locusts destroyed the vegetation; while famine and pestilence, as usual, followed in their train. Connected accounts of the condition of Europe before this great catastrophe, are not to be expected from the writers of the fourteenth century. It is remarkable, however, that simultaneously with a drought and renewed floods in China, in 1336, many uncommon atmospheric phenomena, and in the winter, frequent thunderstorms, were observed in the north of France; and so early as the eventful year of 1333, an eruption of Etna took place.* According to the Chinese annals, about 4,000,000 of people perished by famine in the neighbourhood of Kiang in 1337; and deluges, swarms of locusts, and an earthquake which lasted six days, caused incredible devastation. In the same year, the first swarms of locusts appeared in Franconia, which were succeeded in the following year by myriads of these insects. In 1338, Kingsai was visited by an earthquake of ten days' duration; at the same time France suffered from a failure in the harvest; and thenceforth, till the year 1342, there was in China, a constant succession of inundations, earthquakes, and famines. In the same year great floods occurred in the vicinity of the Rhine and in France, which could not be attributed to rain alone; for, everywhere, even on the tops of mountains, springs were seen to burst forth, and dry tracts were laid under water in an inexplicable manner. In the following year, the mountain Hong-tchang, in China, fell in, and caused a destructive deluge; and in Pien-tcheou and Leang-tcheou, after three months' rain, there followed unheard-of inundations, which destroyed seven cities. In Egypt and Syria, violent earthquakes took place; and in China they became, from this time, more and more frequent; for they recurred, in 1344, in Ven-tcheou, where the sea overflowed in consequence; in 1345, in Ki-tcheou, and in both the following years in Canton, with subterraneous thunder. Meanwhile, floods and famine devastated various districts, until 1347, when the fury of the elements subsided in China."†

Nature thus convulsed, it is no wonder that pestilences should arise, or that, having arisen, they should be widely spread. The signs of terrestrial commotions commenced in Europe in 1348, and the same dark drama of earthquakes, floods, failures of crops, and famine, was enacted to the terrified Europeans, which had been already played on a more costly scale to the Asiatic nations. In the island of Cyprus the plague had already broken out when a pestiferous wind spread so poisonous an odour, that many being overpowered by it fell down suddenly and expired in dreadful agonies. This *simoom* was succeeded by an earthquake, a slaughter of their slaves by the Cypriots, and a fearful hurricane. German accounts say that a thick stinking mist advanced from the East and spread itself over Italy, and then followed the earthquakes, famines, &c., to which we have already alluded, and which we need not more particularly describe than by saying that almost every European nation would seem to have had its share. Enough has been written and said to convince all unprejudiced persons that whatever was the cause or the mode of propagation of the plague, there were great atmospherical and telluric influences set in motion, which, we may fairly suppose, to be powerful in their effects on many, although we know not precisely what those effects are.

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* V. Hoff. Geschichte der naturlichen Veranderungen der Erdoberflache, T. II. p. 264. Gotha, 1824. This eruption was not succeeded by any other in the same century, either of Etna or of Vesuvius.

† Deguignes Loc. cit. p. 226, from Chinese sources.

But what was the disease—what its symptoms—what its character? It was an oriental plague, marked by inflammatory boils and tumors of the glands, such as break out in no other febrile disease. From these boils, and from the black spots which appeared upon the skin, it received in Germany its name of Black Death, and in Italy that of the Great Mortality. The following account is given of the symptoms by the imperial writer Kantakusenos, whose own son, Andronikus, perished by it.

"Great imposthumes* of the thighs and arms of those affected, which, when opened, afforded relief by the discharge of an offensive matter. Buboes, which are the infallible signs of the oriental plague, are thus plainly indicated, for he makes separate mention of smaller boils on the arms and in the face, as also in other parts of the body, and clearly distinguishes these from the blisters,† which are no less produced by plague in all its forms. In many cases, black spots‡ broke out all over the body, either single, or united and confluent.

These symptoms were not all found in every case. In many, one alone was sufficient to cause death, while some patients recovered, contrary to expectation, though afflicted with all. Symptoms of cephalic affection were frequent; many patients became stupified and fell into a deep sleep, losing also their speech from palsy of the tongue; others remained sleepless and without rest. The fauces and tongue were black, and as if suffused with blood; no beverage would assuage their burning thirst, so that their sufferings continued without alleviation until terminated by death, which many in their despair accelerated with their own hands. Contagion was evident, for attendants caught the disease of their relations and friends, and many houses in the capital were bereft even of their last inhabitant. Thus far the ordinary circumstances only of the oriental plague occurred. Still deeper sufferings, however, were connected with this pestilence, such as have not been felt at other times; the organs of respiration were seized with a putrid inflammation; a violent pain in the chest attacked the patient; blood was expectorated, and the breath diffused a pestiferous odour." 7.

In the West the eruption of the disease was marked by an ardent fever, accompanied by an evacuation of blood, which proved fatal in the first three days. Buboes and inflammatory boils did not at first come out at all, but the disease, in the form of carbuncular affection of the lungs, destroyed before the other symptoms were developed. In Avignon it is said that even the vicinity of those who had fallen ill of plague was certain death, and, as a natural and usual consequence of contagion or a belief in it, parents abandoned their infected children, and all the ties of kindred were dissolved. Such is the demoralization of pestilence. After this period buboes in the axilla and in the groin, and inflammatory boils all over the body made their appearance; but it was not till some months afterwards that some patients recovered with matured buboes, as in the ordinary milder form of plague. Boccacio, who was an eye-witness of its fatality in Florence, gives a lively description of it. It commenced here, not as in the East, with bleeding at the nose, a sure sign of inevitable death; but there took place at the beginning, both in men and women, tumours in the groin and in the axilla, varying in circumference up to the size of an apple or an egg, and called by the people, pest-boils (gavoccioli). Then there appeared similar tumours indiscriminately over all parts of the body, and black or blue spots came out on the arms or thighs, or on other parts, either single and large, or

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* Αποσάσεις μεγάλαι. † Μέλαιναι φλυκτίδες. ‡ ὥσπερ στίγματα μέλανα.

small and thickly studded. These spots proved equally fatal with the pest-boils, which had been from the first regarded as a sure sign of death. No power of medicine brought relief—almost all died within the first three days, some sooner, some later, after the appearance of these signs, and for the most part entirely without fever or other symptoms. The plague spread itself with the greater fury, as it communicated from the sick to the healthy, like fire among dry and oily fuel, and even contact with the clothes and other articles which had been used by the infected, seemed to induce the disease. As it advanced, not only men, but animals fell sick and shortly expired, if they had touched things belonging to the diseased or dead. Thus Boccacio himself saw two hogs on the rags of a person who had died of plague, after staggering about for a short time, fall down dead, as if they had taken poison. In other places, multitudes of dogs, cats, fowls and other animals, fell victims to the contagion; and it is to be presumed that other epizootes among animals likewise took place, although the ignorant writers of the fourteenth century are silent on this point.

In Germany it was not so fatal as in other parts of Europe. Many sudden deaths occurred on the coasts of the North Sea and Westphalia, without any further development of the malady. In France, which it entered by Avignon, it was more destructive than in Germany, not more than two in twenty of the inhabitants of many places surviving. In England it was very fatal, only a tenth part of the inhabitants being reported to have escaped. Here the eyes of the patients were considered as sources of contagion, which had the power of acting at a distance. We feel surprised that some of our contagionists who took such pains, on a recent occasion, to consult Defoe, did not also amalgamate this ancient notion with their creed. In Norway not more than a third of the inhabitants were spared, and ships without crews were seen here, as in the Mediterranean, drifting about and thrown on shore. The plague did not appear in Russia till two years later than in Southern Europe.

It is evident, as Dr. Hecker remarks, that this disease was in its important features identical with the oriental plague. The inflammations of the lungs that were frequently observed were probably of the character of those pleuro-pneumonies that occur in all low fevers. In considering the mortality, we should not forget the condition of European Towns at that period. They were, with few exceptions, narrowly built, kept in a filthy state, and surrounded with stagnant ditches, and it is expressly stated, with respect to Avignon and Paris, that uncleanliness of the streets increased the plague considerably. Dr. Hecker's description of the people of the 14th century is as striking as it is true. They were, says he, but little civilized. The church had indeed subdued them; but they all suffered from the ill-consequences of their original rudeness. The dominion of the law was not yet confirmed. Sovereigns had everywhere to combat powerful enemies to internal tranquillity and security. The cities were fortresses for their own defence. Marauders encamped on the roads.—The husbandman was a feodal slave, without possessions of his own.—Rudeness was general.—Humanity, as yet unknown to the people.—Witches and heretics were burned alive. Gentle rulers were contemned as weak;—wild passions, severity and cruelty, everywhere predominated.—Human life was little regarded.—Governments concerned not themselves about the numbers of their subjects, for whose welfare it was incumbent on them to provide.

It is difficult to form an accurate estimate of the mortality. Kairo lost daily, when the plague was at its height, from 10 to 15,000. In China, more than 13,000,000 are said to have perished. In Aleppo 500 died daily —22,000 people, and most of the animals, were carried off in Gaza, and it was reported to Pope Clement, at Avignon, that throughout the East, probably with the exception of China, 23,840,000 persons had fallen victims. The following is supposed to be a probable statement of the mortality, in many of the greater European cities.

In Florence there died of the Black Plague.....	60,000	In Basle.....	14,000
In Venice	100,000	In Erfurt, at least	16,000
In Marseilles, in one month..	16,000	In Weimar.....	5,000
In Siena.....	70,000	In Limburg	2,500
In Paris.....	50,000	In London, at least	100,000
In St. Denys	14,000	In Norwich	51,100
In Avignon	60,000	To which may be added—	
In Strasburg.....	16,000	Franciscan Friars in Germany	124,434
In Lubeck	9,000	Minorities in Italy.....	30,000

Leaving all further accounts of specific mortality we may allude to a few circumstances which tend to throw light on the workings of human nature, and should convey a lesson to rulers, if rulers could ever learn. In many places it was rumoured that plague patients were buried alive. We know how similar rumours prevailed during the recent prevalence of the cholera. Morals were deteriorated every where, and the service of God was in a great measure laid aside in England. Covetousness became general, and when tranquillity was restored the great increase of *lawyers* was astonishing. In Russia the fear of contagion made fathers and mothers desert their children, and children their parents.

Two extraordinary circumstances were connected with this plague:—the spread of the doctrines and increase of the numbers of the Flagellants, and the persecution of the Jews. We have seen even in our own day, religious fanaticism derive strength from the epidemic cholera, and in Paris, as elsewhere, the Jews have been accused of poisoning the wells. The human mind is the same in all ages, and when actuated by impulses so overwhelming as panic and despair, the same dark passions and bloody resolves would appear to arise as a natural and general consequence. The processions of the Flagellants were merely political in their consequences and secret objects, and vicious in their palpable effects, but the persecution of the Jews is a circumstance so remarkable, so illustrative of the black side of human nature, a drama at once so cruel and so instructive, that we cannot forbear a shuddering glance at it.

"The persecution of the Jews commenced in September and October, 1348,* at Chillon, on the Lake of Geneva, where the first criminal proceedings were instituted against them, after they had long before been accused by the people of poisoning the wells; similar scenes followed in Bern and Freyburg, in January, 1349. Under the influence of excruciating suffering, the tortured Jews confessed

* "See the original proceedings, in the Appendix."

themselves guilty of the crime imputed to them; and it being affirmed that poison had in fact been found in a well at Zoffingen, this was deemed a sufficient proof to convince the world; and the persecution of the abhorred culprits, thus appeared justifiable. Now, though we can take as little exception at these proceedings, as at the multifarious confessions of witches, because the interrogatories of the fanatic and sanguinary tribunals were so complicated, that by means of the rack, the required answer must inevitably be obtained; and it is besides conformable to human nature, that crimes which are in every body's mouth, may, in the end, be actually committed by some, either from wantonness, revenge, or desperate exasperation: yet crimes and accusations, are, under circumstances like these, merely the offspring of a revengeful, frenzied, spirit in the people; and the accusers, according to the fundamental principles of morality, which are the same in every age, are the more guilty transgressors.

Already in the Autumn of 1348, a dreadful panic caused by the supposed poisoning, seized all nations; and in Germany especially, the springs and wells were built over, that nobody might drink of them, or employ the water for culinary purposes; and for a long time the inhabitants of numerous towns and villages, used only river and rain water.* The city gates were also guarded with the greatest caution,—only confidential persons were admitted; and if medicine, or any other article which might be supposed to be poisonous, was found in the possession of a stranger,—and it was natural that some should have these things by them for their private use,—they were forced to swallow a portion of it.† By this trying state of privation, distrust and suspicion, the hatred against the supposed poisoners became greatly increased, and often broke out in popular commotions, which only served still further to infuriate the wildest passions. The noble and the mean, fearlessly bound themselves by an oath to extirpate the Jews by fire and sword, and to snatch them from their protectors, of whom the number was so small, that throughout all Germany but few places can be mentioned where these unfortunate people were not regarded as outlaws—martyred and burnt.‡ Solemn summonses were issued from Bern to the towns of Basle, Freyburg in the Breisgau, and Strasburg, to pursue the Jews as poisoners. The Burgomasters and Senators, indeed, opposed this requisition; but in Basle the populace obliged them to bind themselves by an oath, to burn the Jews, and to forbid persons of that community from entering their city, for the space of two hundred years. Upon this, all the Jews in Basle, whose number could not have been inconsiderable, were enclosed in a wooden building, constructed for the purpose, and burnt together with it, upon the mere outcry of the people, without sentence or trial, which indeed would have availed them nothing. Soon after, the same thing took place at Freyburg. A regular diet was held at Bennefeld, in Alsace, where the bishops, lords and barons, as also deputies of the counts (*query*, counties?) and towns, consulted how they should proceed with regard to the Jews; and when the deputies of Strasburg—not indeed the bishop of this town, who proved himself a violent fanatic—spoke in favor of the persecuted, as nothing criminal was substantiated against them; a great outcry was raised, and it was vehemently asked, why, if so, they had covered their wells and removed their buckets? A sanguinary decree was resolved upon, of which the populace, who obeyed the call of the nobles and superior clergy, became but the too willing executioners.§ Wherever the Jews were not burnt, they were at

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* "*Hermanni Gygantis* Flores temporum, sive Chronicon Universale—*Ed. Meuschen.* Lugdun, Bat. 1743. 4to. p. 139. Hermann, a Franciscan monk of Franconia, who wrote in the year 1349, was an eye-witness of the most revolting scenes of vengeance throughout all Germany."

† "*Guid. Cauliac.* Loc. cit."

‡ "*Hermann.* Loc. cit."

§ "*Albert Argentin—Königshoven,* Loc. cit."

least banished; and so, being compelled to wander about, they fell into the hands of the country people, who without humanity, and regardless of all laws, persecuted them with fire and sword. At Spires, the Jews, driven to despair, assembled in their own habitations, which they set on fire, and thus consumed themselves with their families. The few that remained were forced to submit to baptism; while the dead bodies of the murdered, which lay about the streets, were put into empty wine casks, and rolled into the Rhine, lest they should infect the air. The mob was forbidden to enter the ruins of the habitations that were burnt in the Jewish quarter; for the senate itself caused search to be made for the treasure, which is said to have been very considerable. At Strasburg, two thousand Jews were burnt alive in their own burial-ground, where a large scaffold had been erected: a few who promised to embrace Christianity were spared, and their children taken from the pile. The youth and beauty of several females also excited some commiseration; and they were snatched from death against their will: many, however, who forcibly made their escape from the flames were murdered in the streets." 110.

And such is uneducated man when his passions are let loose, excelling in ferocity the tiger, and in cunning the serpent. A very graphic description of the moral, or rather immoral effects of the pestilence in Italy is given by Boccacio. We regret that we have not space for it.

We fancy that we need not inform our readers that the causes of this, as of every other epidemic are involved in impenetrable mystery. The facts are—that it originated in Asia, that it spread from East to West, that it was preceded and accompanied by unusual and destructive terrestrial and aerial changes, and that it appeared to be contagious. Further than this all is an ocean of uncertainty, where the dove of science finds no resting place. The contagionist may hug himself in the idea that it was merely a contagious malady, the anti-contagionist may see all in the earth or in the air, but we fear that the great causes of these epidemic visitations are likely to remain as hidden as they have ever been, and baffle the application of reasoning drawn from ordinary facts. The Faculty of Medicine of Paris were called upon, as Faculties have been in later days, to display their collective wisdom. Whether the ancient or the modern corporations have acquitted themselves best, will be seen from the following amusing manifesto issued by the learned Thebans of the 14th century. It will be observed that the tone of the document is like that of more recent proclamations, somewhat dogmatic.

"We, the Members of the College of Physicians, of Paris, have after mature consideration and consultation on the present mortality, collected the advice of our old masters in the art, and intend to make known the causes of this pestilence more clearly than could be done according to the rules and principles of astrology and natural science; we, therefore, declare as follows:—

It is known that in India, and the vicinity of the Great Sea, the constellations which combated the rays of the sun, and the warmth of the heavenly fire, exerted their power especially against that sea, and struggled violently with its waters. Hence, vapours often originate which envelope the sun, and convert his light into darkness. These vapours alternately rose and fell for twenty-eight days; but at last sun and fire acted so powerfully upon the sea, that they attracted a great portion of it to themselves, and the waters of the ocean arose in the form of vapour; thereby the waters were in some parts so corrupted, that the fish which they contained died. These corrupted waters, however, the heat of the sun could not consume, neither could other wholesome water, hail or snow, and dew,

originate therefrom. On the contrary, this vapour spread itself through the air in many places on the earth, and enveloped them in fog.

Such was the case all over Arabia, in a part of India; in Crete; in the plains and valleys of Macedonia; in Hungary; Albania and Sicily. Should the same thing occur in Sardinia, *not a man will be left alive;* and the like will continue, so long as the sun remains in the sign of Leo, on all the islands and adjoining countries to which this corrupted sea-wind extends, or has already extended from India. If the inhabitants of those parts do not employ and adhere to the following, or similar means and precepts, we announce to them inevitable death—except the grace of Christ preserve their lives.

We are of opinion, that the constellations, with the aid of Nature, strive, by virtue of their divine might, to protect and heal the human race; and to this end, in union with the rays of the sun, acting through the power of fire, endeavour to break through the mist. Accordingly, within the next ten days, and until the 17th of the ensuing month of July, this mist will be converted into a stinking deleterious rain, whereby the air will be much purified. Now, as soon as this rain announces itself, by thunder or hail, every one of you should protect himself from the air; and, as well before as after the rain, kindle a large fire of vine-wood, green laurel, or other green wood; worm-wood and chamomile should also be burnt in great quantity in the market places, in other densely inhabited localities, and in the houses. Until the earth is again completely dry, and for three days afterwards, no one ought to go abroad in the fields. During this time the diet should be simple, and people should be cautious in avoiding exposure in the cool of the evening, at night, and in the morning. Poultry and water-fowl, young pork, old beef, and fat meat, in general, should not be eaten; but, on the contrary, meat of a proper age, of a warm and dry nature, by no means, however, heating and exciting. Broth should be taken, seasoned with ground pepper, ginger and cloves, especially by those who are accustomed to live temperately, and are yet choice in their diet. Sleep in the day-time is detrimental; it should be taken at night until sun-rise, or somewhat longer. At breakfast one should drink little; supper should be taken an hour before sunset, when more may be drunk than in the morning. Clear light wine, mixed with a fifth or sixth part of water, should be used as a beverage. Dried or fresh fruits with wine are not injurious; but highly so without it. Beet-root and other vegetables, whether eaten pickled or fresh, are hurtful; on the contrary, spicy pot-berbs, as sage or rosemary, are wholesome. Cold, moist, watery food is, in general, prejudicial. Going out at night, and even until three o'clock in the morning, is dangerous, on account of the dew. Only small river fish should be used. Too much exercise is hurtful. The body should be kept warmer than usual, and thus protected from moisture and cold. Rain-water must not be employed in cooking, and every one should guard against exposure to wet weather. If it rain, a little fine treacle should be taken after dinner. *Fat people should not sit in the sunshine.* Good clear wine should be selected and drunk often, but in small quantities, by day. Olive oil, as an article of food, is fatal. Equally injurious are fasting or excessive abstemiousness, anxiety of mind, anger, and excessive drinking. Young people, in Autumn especially, must abstain from all these things, if they do not wish to run a risk of dying of dysentery. In order to keep the body properly open, an enema, or some other simple means, should be employed, when necessary. Bathing is injurious. Men must preserve chastity as they value their lives. Every one should impress this on his recollection, but especially those who reside on the coast, or upon an island into which the noxious wind has penetrated.' "* 135.

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* "*Jacob. Francischini de Ambrosiis.* In the Appendix to the Istorie Pistolesi. *Muratori*, Tom. XI. p. 528."

We recommend this document to the attentive consideration of those who may be called on for similar purposes. The easy manner in which general principles are blended with special recommendations is highly creditable to the Parisian sages. Our author gives a very interesting account of the origin of quarantine regulations, but for this we cannot afford space at present. We have given the principal points connected with this formidable plague, and, as the newspapers inform us that the influenza, under which we are now suffering, is to be the forerunner of some dire pestilence, we have enabled the alarmed or the alarmists to see what occurred in other times.

IX.

GRAPHIC ILLUSTRATIONS OF ABORTION AND THE DISEASES OF MENSTRUATION. Consisting of 12 Plates from Drawings Engraved on Stone, and Coloured by Mr. J. Perry, and two Copper-plates from the Philosophical Transactions, Coloured by the same Artist. The whole representing 45 specimens of Aborted Ova, and adventitious productions of the Uterus, with Preliminary Observations, Explanations of the Figures, and Remarks, Anatomical and Physiological. By *A. B. Granville*, MD., FRS.; FLS., FGS., FRAS., &c. &c.

COLOURED lithographs, if ably executed, are now allowed to be the best mode of conveying an accurate idea of anatomical subjects; but, unfortunately, our artists, on this side of the channel, have hitherto failed to come up to the level of their rivals on the Continent. This series of drawings, executed by Mr. J. Perry, of Warren Street, under the immediate superintendence of Dr. Granville, will, we firmly believe, prove that lithographic representation has, at last, on British soil, equalled, if not excelled, any thing of the kind in foreign countries. This is no mean praise—but Mr. Perry is fairly entitled to it. The anatomical preparations, in every case, were placed before the artist, by Dr. Granville, and explained and demonstrated to him. The result is, that, in the course of six years, twelve plates, containing upwards of forty anatomical figures, have been produced, lithographed and coloured by Mr. Perry, rivalling the most successful efforts of French, German, or Italian artists.

In respect to Dr. Granville himself, it appears that he has selected such specimens only as he considered likely to illustrate the more interesting points of physiology as connected with human generation, and which might assist in unravelling the many practical difficulties that beset that thorny question. He has also chosen those which, with a very few exceptions, have not hitherto been published, as far as we know.

Hunter and Soemmering, indeed, have given us splendid engravings of the gravid uterus, and of the human embryo; but they are nearly inaccessible, from price and scarcity, to the professional reader. Even when pos-

sessed, they lose the value of colouring; and are inferior, in point of art, to the present lithographs.

"With one or two exceptions, the representations in Soemmering's work are simply those of the fœtus in its progressive advancement from the third week after fecundation, to the fifth or sixth month of gestation. Those representations have no reference to the whole ovum at those several periods of fecundation: and they are not coloured. Still they are, as he has stated, superior as a work of art to any that had appeared before. Soemmering tells us that he selected for his plates the best specimens of the human embryo, the best draughtsman, and the most skilful engraver; and that when he compared those plates with those of Trioenius, Albinus, Wrisberg, Hunter, and Denman, in order that he might better understand, explain, and perhaps correct his own: '*magnopere delectabatur,*' to find on such a comparison, that the superiority of his plates was not inconsiderable. Well, then, let the reader who has the means of doing so, turn to the two folio plates of Soemmering, and then direct his attention to the fourteen plates contained in the present volume, and I will abide by their decision whether or no, in all such delineations as relate to either parallel or identical subjects in the two publications, the palm of superiority (in every circumstance of design, precision, and execution,) which Soemmering claimed for *his* publication, ought not to be yielded by him to *another* sent forth under the advantage of recent improvements in drawing, and a newly invented art admirably adapted for such imitations of nature. Independently of which advantages there is to be added the charm of colour—a circumstance which so greatly embellishes, without disfiguring, truth." xiii.

That such a series of representations as is here given, must be highly useful to the profession at large, admits of no cavil or doubt; and we can only say that the moment we saw the work, we subscribed to it, from a sense of duty to industrious merit, though it is probable that, in the common course of things, such subscription was unnecessary, as far as pecuniary matters are concerned. We cannot let this opportunity pass, without reminding our readers that, in all works of this nature, there is necessarily a great outlay of money, independent of labour, and consequently that, unless patronage is bestowed on the author he is left a great loser in pocket, by the effort to advance medical science and lay information before the public. We are aware, indeed, that a vast majority of the profession are unable to purchase expensive works, but these should propose and urge the purchase of such works by medical societies and book-clubs, now so universally diffused over town and country.

Under the head Prolegomena, and in 102 Sections or propositions, our author has concentrated, as it were, the elementary principles of all that is known respecting the origin, formation, progress, and metamorphoses of the fœtus, and its connexion with the mother. In these Dr. G. has added his quota of new information to the general stock, especially as connected with the important subject of abortion. Dr. G. limits his observations on intro-uterine existence, to the first five or rather four months, because, after that period the various phenomena of fœtal gestation are so uniform as to afford but little matter of interest to the physiological inquirer. These propositions being, as it were, a dense analysis of volumes of experiments and observations, it is impossible for us to attempt an analysis of them; yet we must offer our readers some specimens of these Prolegomena, in order that they may judge both of their matter, and the manner in which they are constructed.

"13. CONCEPTION, or that result which follows sexual congress, in virtue of which one, or more individuals, of the same species is called into being, takes place in the ovarium of women. This is doubted by Meckel and others, who look upon all cases of ovaric gestation (see Plates IX. and X. A. and B.) as mere accidents, and as only proving that if conception has not before taken place in the womb, it *may* take place in some other part connected with it; but the point has been set at rest by the more recent experiments and microscopical observations of Professor BOER, of Kœnigsberg. I adopt his conclusions. Their correctness is corroborated by the interesting experiments of Prevost and Dumas, although these experimenters admit not that fecundation takes place in the ovarium.

14. The intended receptacle of the embryo is the OVULUM. An ovulum exists in all the vesicles of Graaf, which the ovarium of a woman, who has reached maturity, contains.

15. Viewed by means of a powerful microscope, the ovulum is found to consist of a small yellow spherical body, placed within the vesicula Graafiana, with the upper portion of which it is, internally, in contact; so that it does not float freely in the liquid of that vesicle. This contact becomes more and more intimate as the ovulum enlarges, when that part of the capsule of the vesicle which lies over it becomes, in a correspondent degree, thinner.

16. At first, the little yellow body, being rather opaque, is distinctly seen even without a magnifying glass; but as it advances, it becomes more transparent and, consequently, less distinguishable.

17. This little yellow body is a minute spherical mass, with a roughish or slightly granular surface, and is hollow. Its parietes are thick, around them is an envelope of a much thinner texture, which is distinctly seen, owing to a small space lying between it and the surface of the little yellow body, which space is filled with a fluid substance of a peculiar nature.

18. When FECUNDATION takes place, that part of the vesicle of Graaf to which adheres, internally, the ovulum, bursts, and the ovulum escapes with its external envelope, together with a small portion of the liquid peculiar to the Graafian vesicle, and thus it passes into the fallopian tube.

19. Independently of the external envelope, and within it, the microscope has detected, after fecundation, the existence of another covering, completely investing the little spherical yellow body.

20. The ovulum has been traced, after fecundation, into the cavity of the womb, where the external covering (16) becomes what Boer has called 'the cortical membrane,' *(cortex ovi* of the present work,) improperly considered as a uterine production by preceding writers, and denominated the *reflected* caducous or deciduous membrane.

21. The more intimate covering of the yellow body of the ovulum, that which closely invests its surface, and appears only after fecundation, (19) is afterwards changed into what has been denominated the shaggy chorion: my observations and my plates shew this. Boer, however, professes not to know what becomes of it during the progressive introuterine development of the ovulum.

22. The hollow and spherical yellow body of the ovulum corresponds with the yelk or *vitellus* of the ovum of oviparous animals, and from it all the other several parts of the fœtiferous ovum are derived or formed, as gestation advances, and a progressive development of the parts takes place, from within, without.*"

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* "Professor Boer, who fills the Chair of Zoology at Kœnigsberg, is a man of undoubted veracity, a keen and accurate observer, and has been engaged for many years in the investigation of that most interesting function—reproduction—in mammiferous animals. He made a great number of minute and extremely delicate experiments and microscopical observations on animals and the ovaria of women, which led him to the conclusions I have embodied in my propositi-

"26. The cortical membrane is destined to be absorbed during the first months of utero-gestation, thus exposing the next membrane to the contact of the uterine lining (decidua,) with which a connexion takes place in that part where the placenta is to be formed. In that part, however, the cortex ovi is never altogether obliterated, but only made thinner; and, in process of time, it is converted into a mere pellicular envelope, which not only serves to divide the filiform vessels of the chorion into groups or cotyledons in order to form the placenta, but also covers all over those cotyledons or groups of vessels. I have called this the *membrana propria*.*

27. While the process or metamorphosis of the ovulum noticed by Boer takes place in the ovarium, in consequence of fecundation, the cavity of the womb does not remain idle, but forthwith sets about weaving for itself a general lining—a sort of pseudo-textile membrane—which extends all over the cavity, descends partly into the cervix, and is *often* (not necessarily always,) projected even into a great portion of the fallopian tubes.

28. This adventitious lining of the cavity of the womb is formed quite independently of the presence of the ovum, for it has been found in most cases of devious gestation, where the fœtus was *extra muros uteri*, and has been found advanced in its progress of formation, while the ovulum was, as yet, on its way through the fallopian tube after fecundation. (Haller, Lobstein, Velpeau, Meckel, Pockels.)"

"31. It is probable that the decidua consists of two laminæ, inasmuch as we always find it with one surface perfectly smooth and the other rough. If so, they are most intimately connected. It is at least one-twentieth of an inch in thickness during the first five or six weeks of uterofœtation, when its tissue is found to be more knotty, coarse, and full of short threads, (not unlike a very ordinary mat,) than a purely membranaceous or cloth-like lining would be. It is not until a more advanced period of gestation that the decidua becomes distinctly membranaceous, in which state it lines the entire cavity of the uterus."

"34. As soon as the Ovulum has departed from its vesicular nest in the Ovarium, the cavity which remains begins to fill up with a yellow substance, different in texture from the surrounding tissue of the Ovarium, and having, generally, a radiated centre of a whiter colour. This is the *corpus luteum*.

35. The presence of *corpora lutea* in the Ovarium of women, is always an indication that as many ovula have escaped from that organ; but it is not necessarily an evidence that the individual has been impregnated, as ovula have escaped without the congress of the two sexes.

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ons, and which he forwarded in a Latin epistle, entitled 'De Ovi mammalium et hominis genesi,' to the Imperial Academy of St. Petersburgh, with a plate, carefully engraved, representing all the details above alluded to. These he afterwards, and within the last four years, enlarged upon very considerably in a subsequent publication."

* "If the reader can procure a placenta which has been thrown off immediately after the birth of the child, without any effort, and cleaning it of all coagula from off the surface which lay next to the uterus, by careful maceration and washing, he will afterwards introduce a small quill or pointed tube into one of the arteries of the navel-string, and blow strongly into it, he will find that the air raises upon that surface, to various degrees of puffiness, a very delicate pellicular covering, through which none of the air can escape, unless through an accidental laceration. I have often made the experiment, which I used to relate to my class in my lectures on midwifery many years ago. Lauth, of Strasburgh, has stated the same thing; so had Ruysch long since, and others, proving at once that there is not a direct communication with the mother from the fœtus."

36. It is inaccurate, therefore, to state that a woman has been pregnant because a *corpus luteum* has been found in one of the Ovaria after death, or to calculate the number of children she has borne from the number of *corpora lutea* so detected. *Corpora lutea* have been found in the Ovaria of very young girls, of unmarried women of the strictest virtue, in newly-born female infants, and lastly, in sterile animals, such as mules." vi.

The ovulum, on entering the womb, is about the size of a small pea; but the interval of time, between fecundation and its entrance into the uterus, is not exactly known. On the 14th day the ovulum is about the size of a Spanish nut. The chorion is surrounded by a thick membrane—the cortex ovi. After being safely lodged in utero, the ovulum continues to grow on its own life principle, for a while, until its connexion with the mother through the medium of the deciduous membrane, which becomes, as it were, an additional covering to the ovulum. The growth of the ovulum causes the cortex to burst, as happens with the cortex of certain seeds, and with the outer shell of the ova of some oviparous animals.

"On the cortex bursting, the lanuginous or fibrillous membrane within it (21) is exposed, when the fibrils will forthwith entwine themselves with the flocculi of the decidua, and thus the Ovulum fastens itself to the uterus by one or more contiguous points.

The membrane having these fibrils on its surface, has been called the chorion —and from the circumstance that these fibrils, both before the cortex which lies over them has burst, as well as afterwards, serve to promote the nourishment of the fœtus, I have styled it, the nutritive membrane or involucrum of the fœtus. It has been so considered by Ruysch, who calls the villous side of the chorion, '*succosa nutritioni fœtus inserviens.*'" viii.

This nutritive membrane is bifoliated—perhaps trifoliated. The internal surface of the chorion is vascular, as is proved by its diseases, chiefly of an inflammatory character, ending in thickening of texture. Also by injections.

"These facts, demonstrative and corroborative of the vascularity of the chorion, (45, 46, 48, 49,) explain and account for the reality of that self-existing life-principle inherent in the fecundated Ovum (42), which detaches it from its nest (vesicula Graafiana), enables it to travel through the tube, to grow or expand while thus travelling, and to maintain that same power of growth and development for a short time after its reception into the womb, until its final and effectual implantation on the maternal stock (uterus.)" viii.

The same holds good with respect to the amnion, or inner transparent membrane of the ovum, as proved by morbid anatomy. And if a vascular membrane, there is no difficulty in conceiving it to be a secreting one also —hence the source of that particular fluid, the liq. amnii, in which the embryo is suspended.

Dr. Granville thinks it probable that the embryo lives throughout the whole period of utero-gestation, by virtue of its own life-principle.

"When the Ovulum has made good its fastening to the adventitious lining of the womb (decidua), the circulation of the blood in it is as yet imperfect. The Ovulum does not—cannot—receive the blood of the mother. How could such a gossamer-like being, organized as the Ovulum has been proved to be, during the first days after fecundation, be made a part of so impetuous a torrent as the circulation of the blood of the mother, without instant destruction to the produce of conception? No. The blood of the embryo is first formed within itself. (Prevost, Home, Magendie, Adelon, Serres, Rolando.)" x.

The new BEING passes through two striking metamorphoses previously to the enjoyment of extra-uterine life—the embryonic, and the fœtal states. The latter begins at the moment when the new being is grafted on the maternal womb, and continues till parturition. In the former, or embryonic state, it is without any communication, direct or indirect, with the mother—still less so, with the external world. This state persists for about two weeks after fecundation, during which period the embryo derives its nutrition from the cortical membrane of the ovum. Up to the second month, the growth of the embryo is slow—it is accelerated during the third—slackens again in the fourth and fifth months; between which and the last month the increase is more rapid.

Until within these few years it was supposed that the nervous system was formed first; but recent examinations have proved that the vascular system takes precedence in the nisus formativus. The spinal marrow appears before the brain, and the cerebrum before the cerebellum.

"The blood is formed independently of the heart, and appears at two distinct points from it, and acquires a motion independently of it. (Prevost, Dumas, Baer.) The veins are formed first—next, the heart—lastly, the arteries, &c. (French Physiologists.) The arteries are, by an Italian physiologist, said to be the first to appear. (Rolando.)" xii.

The intestinal canal is the first part of the digestive apparatus that appears.

A considerable space is occupied in delineating the connexion between the placenta and the uterus, which we must pass over, with the exception of an extract or two.

"86. The decidual vessels derive their fluid from the uterine vessels. The arteries which convey uterine blood to the decidual vessels, are tortuous and very small; they are the adventitious produce of the *membrana propria* of the womb acting under the influence of a peculiar stimulation which produces the decidual membrane, as inflamed surfaces produce organized exudations. Though the latter be formed in the uterus, even when the embryo is lodged, by aberration, in some other part of the abdomen, its presence must not be deemed, on that account, unessential to the embryo; for a vascular membrane, as nearly alike to it in texture as can be, has invariably been found to connect, by blood-vessels, the embryo to some vital part nearest to where that embryo has been casually deposited, that part having, at the same time, its circulation and vascularity greatly increased, and becoming, in fact, the parent of the connecting vascular membrane in question.

87. Nothing proves more distinctly, (it might be said almost to demonstration,) the accuracy of the views (82, 83, 84, 85,) which tend to establish the fact of a vascular communication between the arterio-venous system of the mother and the placenta (by intermediate decidual circulation) and to shew the fallacy of those who deny such a communication, than the very phenomenon just noticed (86). Here morbid anatomy again comes to the assistance of normal anatomy and physiology, and affords evidence which is not liable to the errors that have been unjustly affixed to experimenters with injected fluids. Of the many examples that might be quoted in support of this proposition, the one which is stamped with the authority of Lallemand may be selected as the most striking.* In a case of ventral aberrant fœtation, which had proceeded to the end of the

* "Observations relatives à la Génération. Par F. Lallemand. Paris, 1818."

sixth month, before it destroyed the patient, a vascular and tomentous membrane had been formed on the surface of the peritoneum, to which adhered the regular placenta and chorion of the fœtiferous ovum. This membrane resembled in every respect the decidua at six months—it was thicker, and more red and vascular where the placenta was adherent than any where else. 'Vessels as visible as those of the inflamed conjunctiva,' observes the author, 'passed from the highly-injected peritoneum, opposite the placenta, into the membrane which lay between them; while other vessels from the placenta reached as far as the same membrane, and were lost in it where they probably anastomozed by their very minute terminal ramifications.' (Lallemand.) The conclusion which this really eminent physiologist and good man has come to, upon this subject, is striking, and truly to my purpose. 'The decidua,' says he, 'has no other function to perform than that of serving as a capillary system, intended to be the medium of communication between the blood-vessels of the mother and those of the fœtus.' (page 21.)

88. It is possible that the venous blood of the decidual vessels may be returned through the great uterine sinuses, the large open orifices of which, covered with an almost valvular flap, have been described by the best anatomists, as being applied to the surface of the decidual placenta. Magendie* thus states his opinion on this subject. 'In women large openings, which communicate with the uterine veins, are observed on that part of the uterus to which the placenta adheres; but it is not clear whether these venous orifices are destined to absorb the blood of the fœtus, or to suffer that of the mother to escape on the surface of the placenta. I am inclined to admit the latter idea—but no proof whatever exists of its correctness." (page 554.) xvii.

The circulation of the blood in the ovum appears to be independent of that of the mother—the embryo creating its own blood, and supporting its own existence. Yet its blood requires changes, and those changes are produced through the influence of the mother's blood. The placenta appears to be the organ through which this change is effected.

"The decidual vessels receive the arterial blood of the mother. This is spread over a very considerable surface of tubular structure, which being, in its distribution, made to come in apposition with the infinite ramifications of the umbilical placental vessels, at innumerable points, (like the inspired air distributed through the bronchial passages is made to come in apposition with the myriads of vascular rami of the lungs); the required changes in the blood of the fœtus are produced, just as the changes called for in the pulmonic blood, are produced by the peculiar arrangement of that part of the animal economy. When the arterial blood of the mother has produced the desired effect on that of the fœtus—it is returned by the decidual veins to the uterine sinuses applied, like absorbing mouths, to the surface of the decidua, when it enters into the general venous system of the mother. (Magendie; Personal Observations.)" xviii.

Our author is inclined to think that some degree of respiration goes on in the fœtus, as a means of facilitating growth and supporting life. This opinion is entertained by Geoffroy St. Hilaire and Müller. The presence of air has been detected in the amnionic fluid by Lassaigne, and by Dr. Granville himself. The process of respiration, if it take place at all, is supposed to be effected by the cutaneous pores, as in aquatic insects.

"It is of the utmost importance to bear in mind the great distinction which

* "Precis Elementaire de Physiologie, 2d. edit. Paris, 1825.

exists between the independence of the fœtus, *quoad* life, and its dependence, *quoad* nutrition, in respect to the mother. The former state is secured by a total separation of the two circulations (maternal and fœtal). The latter by the close reciprocal contact of the organs of those circulations. Thence is it that we find the fœtus to live on, notwithstanding that its connexion with the mother has been partially and sometimes even wholly, severed;—while on the other hand we cannot help admitting that, albeit this independence, the influence of the mother over the fabric of her offspring is unquestionable." xx.

The foregoing particulars have been picked out of Dr. Granville's Prolegomena, rather as bricks from a building, to exhibit specimens of the materials, than as affording any idea of the edifice itself. The great body of the volume is occupied by the plates—the descriptions of those plates—and notes, physiological, pathological, and practical. These will require another notice; mean time, we cannot too earnestly advise every practitioner who desires to make himself thoroughly acquainted with the subject of this volume, to possess himself of the work.

X.

WORKS ON MORBID ANATOMY.

I. Anatomie Pathologique du Corps Humain, &c. Par *J. Cruveilhier*, Professeur d'Anatomie à la Faculté de Medecine de Paris, &c. &c. Livraisons quinzieme et seizieme. Bailliere; Paris et Londres.

II. Illustrations of the Elementary Forms of Disease. By *Robert Carswell*, M.D., Professor of Pathological Anatomy in the University of London, &c. &c. Fasciculus second. Carcinoma. Price 12*s*.

We have on former occasions observed that the plan of M. Cruveilhier's work is different from that adopted by Dr. Baillie, in his System of Morbid Anatomy. Dr. Baillie's is the method adopted by two contemporary illustrators of the same subject, Drs. Carswell and Hope. All these gentlemen have given general descriptions of lesions, without allusion to particular cases. Dr. Hope, indeed, does refer to some, but not to such an extent as to invalidate the general plan. M. Cruveilhier's fasciculi, on the contrary, are made up of references to cases, and the drawings of morbid appearances are taken from the subjects of the cases related in the text. There is this disadvantage attendant on Cruveilhier's mode of proceeding—the work must necessarily be extremely diffuse. It will, however, be very valuable for reference, and will furnish instructive matter in detail.

The drawings are very inferior to those of our own countrymen, and as we always give a fair portion of praise to our foreign brethren, we do not think that we shall be accused of national partialities in making this remark.

The sketching is stiff, formal, and in many instances caricatured, and the colouring highly exaggerated. Cannot M. Cruveilhier amend this?

The fifteenth fasciculus is chiefly devoted to diseases of the fœtus. It comprises apoplexy—diseases of the lungs and thymus of the fœtus—diseases of the pharynx—hydrocephalus—and a case of absence of the cerebellum. There is also a case of hernia through the thyroid foramen. The sixteenth fasciculus treats of diseases of the placenta—heart—liver—spinal marrow (spina bifida)—uterus—and veins. We will take the fifteenth fasciculus first.

ON THE APOPLEXY OF NEWLY-BORN CHILDREN.

It appears from the researches of M. Cruveilhier at the Maternité, on the cause of death of still-born children, that apoplexy is that cause in a third of those who die during the progress of labour. He has observed this in almost all the cases, usually considered as asphyxia or congenital weakness.

The constant anatomical character of the apoplexy of newly-born children is, an effusion of liquid blood within the cavity of the arachnoid. Most frequently the effusion is limited to the surface of the cerebellum, sometimes it covers at the same time the posterior lobes of the cerebrum, and in some instances the cerebrum and cerebellum are covered with a layer of blood, the source of which it is sometimns difficult to discover. The extravasation rarely occupies the cavity of the ventricles, but M. Cruveilhier has seen three such cases. He has never witnessed extravasation into the substance either of the cerebrum or cerebellum, although it is occasionally intensely injected. In all the cases which he has seen the spinal dura mater was distended with liquid blood, contained both in the cavity of the arachnoid and in the subarachnoid cellular tissue.

These effusions are often accompanied with collections of blood under the hairy scalp, and ecchymoses and small collections are frequently met with between the peritoneum and the cranial bones.* Once M. Cruveilhier saw coagulum effused along the whole length of the superior longitudinal sinus, between the dura mater and the bone; and on another occasion the pericranium of the two parietal and occipital bones was separated from them by a thick layer of coagulum. Our author observes that this separation may account for those occipital abscesses that we see occur during the first days of life, and in which the bones are laid bare. He attended a child in whom the large part of the occipital bone came away in three fragments; the child lived.

All apoplectic children are not born dead. In a tolerable proportion respiration is established, either spontaneously or in consequence of the exertions of the practitioner, and they live 24 or 48 hours, or even three or

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* In one of the periodical journals a case of this sort has recently been published, and a good deal of surprise expressed at the occurrence. We have M. Cruveilhier's authority for considering it frequent. We ourselves saw a case, in which the collection formed a large fluctuating tumor on the scalp. We had no difficulty in deciding on its nature, but an eminent surgeon had never witnessed a similar case.—ED.

four days in a state of weakness, torpor, immobility, and diminished temperature. Probably some survive when the extravasation is not very great. M. Cruveilhier has never observed paralysis.

The cause of this fœtal apoplexy is in many cases inscrutable. So far from its being due to the application of the forceps, M. Cruveilhier believes that this frequently prevents it. In the majority of instances it is probably owing to the length of the labour. But our author has seen it after an ordinary birth, and even after a very rapid delivery, whilst, on the other hand, labour has lasted forty-eight hours or longer without any accident happening to the child. M. Cruveilhier seems to suppose that constriction of the neck by the cord, or by the neck of the uterus and the external soft parts after the issue of the head, or after that of the trunk in cases of turning or feet-presentation, may produce the disease. Compression of the umbilical cord in a case of presentation of the cord, has been a very manifest cause. M. Cruveilhier also supposes that, in many cases, after the escape of the waters, the uterine contractions on the cord may be an efficient agent.

M. Cruveilhier looks on the affection as always produced by mechanical means, and thinks that a speedy termination of the labour would prevent it in the greater number of cases. He has seen retropulsion of the cord, when this presented, practised successfully at the Maternité; and in feet-presentations a speedy application of the forceps, after the exit of the trunk, will save many children.

The cerebral apoplexy is sometimes accompanied with extravasations in the lung, in the thymus, whilst the liver and spleen are gorged with blood, and the gastro-intestinal mucous membrane is much injected. Our author relates some cases to some of which we will allude.

Case 1. A child was born dead in the first position of the vertex. The labour was natural and lasted sixteen hours. On opening the head, a great quantity of black blood was found around the cerebrum and cerebellum, with more liquid blood in the spinal canal. There was no perceptible compression of the cord.

Case 2. *(Third.)* A child presented in the third position of the right shoulder, that in which the head answers to the left iliac fossa; the waters had long escaped. An attempt at turning by an ill-informed person having failed, it was necessary to repeat it. When the trunk was extracted the head remained for a long time, the neck of the uterus being contracted on that of the child who was born dead, although active motions had been felt a few minutes previously. On examination, there was considerable injection of the hairy scalp, periosteum, and bones; the spinal dura mater was very distended and blueish, and the spinal marrow immersed in liquid blood. A thin layer of blood surrounded the cerebrum, a thicker one the cerebellum.

Five other cases are related by M. Cruveilhier. In one the child was born dead, with a vertex presentation; there was suspension of the pain after the issue of the head, and the birth of the trunk was slow. In the next the child was born dead, with a head-presentation. In the next the child died an hour after birth. In the next the child died after the issue of the cord. And in the last the child was hydrocephalic, and born dead after a natural labour.

DISEASES OF THE LUNG, THYMUS, AND PANCREAS IN THE FŒTUS.

M. Cruveilhier observes that during gestation the ovum may be considered a part of the mother, and is liable to disease as she is. Thus it may be affected with pleurisy, pneumonia, peritonitis, chronic inflammation of the intestines, ascites, hydrothorax, syphilis, eruptions, even scirrhus. M. Cruveilhier appends cases of many of these affections, and as we fear that practitioners in this country are not sufficiently aware of the disorganizations that occur in the fœtus, we shall select the most striking for notice.

CASE 1.—*Double Pleurisy—death thirty-six hours after birth.* A woman had experienced for eleven days before her confinement a sensation of oppression amounting even to suffocation, which required bleeding and sinapisms. She was relieved, but fever continued till the moment of accouchement, which was natural and at the proper time. The child was well-formed but small and weak; it languished for thirty-six hours, when it died. It was marked as dying of "congenital weakness." On examination there was pleurisy on each side, with effusion of a turbid liquid and false membrane; the base of the lungs was indurated, or rather in the condition of the lung of children who have not respired.

CASE 2.—*Peritonitis and Pneumonia in a Child, dead three hours after birth.* On dissection of this child, which was born naturally and with a vertex presentation in the first position, a great quantity of yellowish serum, with flakes of lymph, was found in the cavity of the peritoneum. The internal surface of the stomach presented a punctuated and linear redness. The lymphatic glands were large and indurated. The lungs presented externally a speckled appearance, owing to numerous red irregular indurated masses dispersed through the organ; they might be termed large tubercles.

M. Cruveilhier remarks that the appearance of the mucous membrane of the stomach alluded to in this case is very common in the fœtus.

CASE 3.—*Spinal Arachnitis—death on the fifth day.* A child, that appeared rather prematurely born, took the breast for three days, but became motionless and cold on the fourth. M. Cruveilhier saw it in this state, and thinking it debility, prescribed an aromatic bath, which usually succeeds in cases of that description. On the next day the child died. On examination there was spinal arachnitis; the sub-arachnoid cellular tissue of the medulla was infiltrated with pus, which extended around the pons, and along the fissures of the cerebrum.

M. Cruveilhier supposes that the arachnitis was subsequent to birth.

CASE 4.—*Dropsy and Purpura in a seven months' Fœtus—death twelve hours after birth.* This child was anasarcous, and the spots of purpura covered the whole surface of the body and mucous membrane of the tongue. On examination there was serous fluid in the abdomen, the liver was reduced to half its accustomed dimensions, and there were some purple spots on the mucous membrane of the intestines. There was hydrothorax on the right side. Nearly all the muscles presented extravasations of blood in their substance, as did the pericranium and mucous membrane of the pha-

rynx. The cerebral sub-arachnoid cellular tissue was infiltrated with serum, the thoracic duct distended by bloody serous fluid.

Case 5.—*Dropsy and Purpura—death one hour after birth.* In this child there was a great quantity of serum in the pericardium, a little in the pleuræ, some in the abdomen. The liver was of greenish colour and very dense. There were ecchymoses beneath the scalp, in the muscles, &c.

The mother of this child was in a state of cachexia, the result of syphilis and mercury. She was delivered at the full time, and the labour was easy. The mother of the infant in the preceding case had been for a long time in a weakly condition.

Case 6.—*Chronic Inflammation of the Thymus and Pancreas, &c.* The child was born at the full time, and the vertex presented. The feet were stripped of epidermis and livid. The child died after breathing for a few minutes. On examination a collection of pus was found beneath the sternum; it occupied the thymus, which was of large dimensions, and divided into cellulæ, those above containing tuberculous matter, those below filled with pus.* The lungs were large, heavy, and only permeable in a few points, their tissue being dense and of a rose colour. The liver was extremely small. The pancreas was of lardaceous appearance, and resembled in structure a scirrhous breast. It adhered to the right renal capsule and right kidney.

M. Cruveilhier observes that, in some cases, there appears to be retention and collection of the liquor of the thymus. In a child that died of marasmus at the age of six months, the thymus was found of double its natural size, and full of tubercles and purulent collections; the lungs were perfectly sound.

Case 7.—*Induration of the Pancreas and Lungs, &c.* A child died immediately after birth, the pancreas was indurated and resembled scirrhus, and the lungs were almost entirely in a state of induration. The intestines presented a curious condition. There were whitish, elliptical patches, with considerable thickening of their parietes; the patches were strewed with small ulcerations, and in some points the thickening was such that the cavity of the intestine appeared completely obliterated.

Case 9.—*Obliteration of the Orifice of the Pulmonary Artery, and Aneurism of the Right Side of the Heart in a Fœtus.* The child was born at eight months and a half in a state of extreme weakness; the respiration was imperfect, difficult, and almost convulsive; it died on the fifth day. On examination the heart was of enormous size, filling more than half the thorax, and pressing back the lungs, which were diminutive. The right chambers formed seven-eighths of the organ, the left were so small as to merely resemble an appendix. The tricuspid valve was fixed to the ventricular parietes, and vegetations occupied the free edge of the valve. The

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* Sir Astley Cooper, in his work on the Thymus Gland, observes that, in an experience of forty years, he has seen but one case of disease of the thymus. But Sir Astley is not speaking of the fœtus, and besides the worthy Baronet has not practised midwifery.

orifice of the pulmonary artery was completely obliterated, but otherwise the vessel and its ramifications were sound. The fossa ovalis was large, the foramen was a mere chink, in which a coagulum was engaged.

DISEASES OF THE LUNGS IN THE FŒTUS.

Diseases affecting the tissue of the lung are incontestibly the most frequent to which newly-born children are subject. In many cases the disease appears to have existed for a few days only before birth, or even to have been the consequence of the commencement of the act of respiration. The partial development of the lungs, or pulmonary infiltration observed in the fœtus born before its time, and which breathes for several hours or even days, are evidently, in M. Cruveilhier's opinion, the result of the establishment of the function of respiration in lungs not yet adapted to it.

In the greater number of cases the disease has existed for several days or even months. The lungs then present different appearances. Sometimes they display the lobular pneumonia. Lobules, or groups of lobules, indurated or infiltrated, are dispersed in the midst of healthy tissue. Sometimes the lungs are extensively affected; M. Cruveilhier has seen both invaded throughout at once. The altered tissue sometimes resembles that of the pneumonia of the newly-born, at others it is completely carnified, granular, and the lobules represent glandular grains perfectly distinct. Lesion of the lungs is so frequent in the fœtus, that M. Cruveilhier has no hesitation in asserting that, *as many newly-born children die of disease of the lungs as adults.*

Such children die with asphyxia, but this differs from the asphyxia which is said by accoucheurs to be the cause of death, inasmuch as the latter is the mere result of the labour. The greater number of those who are said to die of such asphyxia do in reality die of apoplexy. The newly-born may live with a much less sound quantity of lung than the adult, and for reasons sufficiently obvious. Induration of the lungs may exist in the fœtus with embonpoint, and the appearance of perfect health. The bronchi are frequently filled with thick mucus, as in acute catarrh. The lungs of the fœtus may display much more extensive lesions than are sufficient to destroy the life of the adult.

M. Cruveilhier relates a considerable number of cases illustrative of the lesions alluded to. We will take only two or three.

CASE 1. (3.)—*Lungs nearly entirely infiltrated with Blood.* The infant was born very weakly, and so continued for twenty-four hours, when it died. There was considerable effusion of bloody serum in the pleuræ. The lungs were indurated and infiltrated with blood, which flowed as from a sponge; one only presented some permeable lobules.

CASE 2. (7.)—*Phlyctenæ—some Pulmonary Lobules impermeable—Pulmonary Catarrh.* The phlyctenæ were situated on the feet, hands, and left upper eyelid. It lived thirty-six hours. Some lobules of the lung were impermeable from sero-sanguinolent infiltration, and one was infiltrated with pure blood. The trachea, the bronchi, and their divisions were filled with thick mucus.

A great number of children affected with syphilitic pustules have died of

pneumonia or other lesion of the lungs, originating anterior to birth. Four cases are related. In the first there were cutaneous pustules, and the lungs were infiltrated here and there with blood and serum. In the second case the cutaneous pustules were connected with masses of induration in the lung, containing pus, and suppuration between the dura mater and frontal bone. In the third case the cutaneous pustules were accompanied with a greyish induration of the lungs throughout their whole extent; the spleen was much enlarged. In the fourth case the cutaneous pustules were accompanied with complete induration of both lungs.

Diseases of the Mouth and Pharynx.

Figures 1, 2, 3, of the third plate of this fasciculus are devoted to the delineation of aphthæ, le Muguet. M. Cruveilhier observes, that this affection is sometimes confined to the buccal membrane, sometimes extends to the mouth and pharynx, and sometimes attacks the œsophagus into which it penetrates more or less deeply. It is most commonly abruptly stopped at the termination of the epidermis of the œsophagus at the cardia. Under the false membranes that constitute the affection, and which are sometimes confluent, the mucous membrane is invested with its epidermis, and presents no other alteration than a redness, slight when the patches are distinct, intense when they are confluent. The muguet rarely penetrates into the air-tubes. Sometimes the circumference of the superior orifice of the larynx is studded with it, whilst the mucous membrane within is free. But M. Cruveilhier delineates one instance of implication of the ventricles of the larynx. The linear character of the pseudo-membranes of the œsophagus depends on the longitudinal folds of the mucous membrane.

M. Cruveilhier remarks that the muguet is nothing else than pseudo-membranous inflammation of the mucous membrane of the mouth. All ages are subject to it, though in the adult it is rarely idiopathic, but almost always symptomatic of some grave lesion of the intestinal canal, and appearing at a more or less advanced period of acute and chronic diseases, sometimes even during a false convalescence. It usually bodes a fatal termination, especially where it resists treatment. It may extend in the adult, as in the infant, to the pharynx and œsophagus, which our author has on several occasions found filled with a pultaceous whitish or brownish matter. In newly-born infants it is often epidemic, and it is endemic in certain hospitals where the wards are cold, humid, and ill-ventilated. This is the case with the hospital of Limoges, when the disease formerly committed great ravages. M. Cruveilhier doubts the advantage of the hospital system for the newly-born. The milk of a good nurse and pure air are much more advantageous than medicine.

Follicular Ulceration of the Stomach.

M. Cruveilhier remarks that this form of ulceration has been described by M. Belliard, who has published fifteen cases. In eight of these the children were from four to six days old; six were from eight to twelve; one was aged three weeks; proving, so far as a few facts can do so, that the nearer birth, the greater the prevalence of this affection. Several of the patients had severe lesions in other organs; one only, aged four days, had no other lesion than ulceration of the stomach.

Figures 4, 5, 6, of plate III. represent this lesion in the stomachs of children who died, one on the eighth day, another on the fifteenth, and the third one month after birth. In all, the ulcers were more or less numerous, and some had run into each other.

The remainder of the fifteenth fasciculus is occupied with some considerations on, and cases of the removal of, the cerebral matter in hydrocephalus; a case of complete absence of the cerebellum, observed in a girl who died in her eleventh year, and a case of hernia through the foramen ovale. Further reference to these subjects will be found in the foreign department of the Periscope of this number, and we fear we must waive all consideration of the sixteenth fasciculus until our next. Before we quit M. Cruveilhier, we must take the liberty of recommending the present notice of the organic lesion of infants to the attention of our brethren, too many of whom are ignorant of the morbid anatomy of the fœtus. Indeed it is probable that few are aware of the frequency of its structural changes.

We can give but brief salutation to Dr. Carswell, whose work is the second on our list. It made its appearance too late to permit us to notice it at length, but a further reference to it also will be found in our Periscope.

It is devoted to the elucidation of carcinoma, and contains four plates, of which it is but justice to observe that they are very beautifully executed. Plate I. contains three drawings of carcinomatous growths of the stomach. The external characters of the disease, its section, and the submucous tissue from which it chiefly springs are well delineated. Plate II. contains also three drawings; they are intended to portray the medullary form of carcinoma, and the transition stages between it and scirrhus. Plate III. represents carcinoma in the stomach, duodenum, rectum, and female bladder. It consists of five figures. The first shews the affection of the rectum. The disease seems essentially seated in the submucous tissue, but the cellular of the muscular texture is also altered. The second displays a cancerous ulcer of the stomach near its cardia, also essentially seated in the submucous tunic. The third shews medullary tumour of the duodenum, confined to its mucous membrane; the lacteals are filled with cerebriform matter, and the lymphatic glands contaminated. The last figure represents what is called cauliflower excrescence of the female bladder; the mucous and the submucous tissue is affected. Plate IV. represents carcinoma in the liver, and does so very well. The development of the morbid growth from a small deposite up to a large one, or the confluence of several, with central softening and irregular vascularization is displayed. But the most interesting part of this plate is the delineation of the cerebriform matter in the veins, passing thus from the morbid mass to the circulation. Thus we find this morbid degeneration in both veins and absorbents, and we need not wonder at the almost universal contamination of system so unfortunately witnessed in this disease.

We need not pronounce any formal eulogy of the plates; they are, as we have said, remarkably well executed. We would suggest to Dr. Carswell to outline as definitely and yet as little formally, and to colour as truly as possible. The work is one which should be encouraged by all medical lovers of art as well as of science, and indeed no practitioner who aspires to respectability should at this time of day neglect to purchase one or other system of plates of morbid anatomy.

We again refer to our Periscope for a critical notice of the letter-press.

Periscope;

OR,

CIRCUMSPECTIVE REVIEW.

"Ore trahit quodcunque potest, atque addit acervo."

I.

Spirit of English Periodical Literature, &c.

I. Dr. Graves on the Treatment of Various Diseases.

Dr. G. is engaged, and very profitably too, in publishing a sort of catalogue raisonné of his experience. It is a refreshing thing to turn occasionally from systems and generalizations to the raw material, and add some facts to our own stock in trade. The first subject to which Dr. Graves adverts is that of

Headaches in Young Women.

He observes that when connected with an obviously plethoric state of body, the treatment is sufficiently well understood—early hours, spare diet, active exercise, rather powerful purgatives. When there is much determination of blood to the head, leeches may be applied behind to the ears, or to the feet, and the bleeding in the *latter instance should be kept up* by the pediluvium. Dr. G. speaks very highly in favour of the latter method, and illustrates its good effects, by relating the case of an old gentleman, who was subject to attacks of violent palpitations, accompanied by the feeling of approaching dissolution. Dr. G. saw him in a very severe paroxysm, in which the ordinary means had failed. A pediluvium as hot as it could possibly be borne afforded speedy and decisive relief. In the habitual headaches of robust and plethoric young women, it is sometimes necessary to have recourse to general blood-letting when the paroxysm is violent. A young lady had been subject for years to attacks of most distressing severity, which baffled all internal remedies and external applications. At length Dr. Stokes bled her ad deliquium, during a violent paroxysm, with immediate, and what is more, with permanent relief, for she has had no subsequent attack.

Dr. Graves makes some remarks on the treatment of amenorrhœa, which are practically so judicious that we feel anxious to impress them on the minds of our readers.

"The periodicity of this function can still be traced, even in cases where suppression has continued for a great length of time by means of the menstrual *molimina*, which occur at stated intervals; in endeavouring to bring on the discharge, therefore, we must be guided as to the time the attempt should be made by an observance of the period at which these *molimina* occur; for a few days before that time, our efforts to produce a determination of blood to the uterus may be judiciously employed, and if they fail, the attempt should be abandoned, until a few days before the next menstrual period: of course I speak not here of the general constitutional treatment, for this must be constantly persevered in, one of the chief means of bringing back this evacuation being the restoration of the health to the natural standard; in some this is to be effected by tonic, and in others by an opposite mode of general treatment.

But of this it is quite unnecessary to speak, as all practitioners are acquaint-

ed with the essential difference between the general modes of management required according to the constitution and habits of the patient. What I wish to impress on the minds of the junior members of the profession is, that all those remedies which actually determine to the uterus or its neighbourhood, as pediluvia, stuping of the genitals, leeches to the inside of the thighs near the labia, aloes and other stimulating purgatives, &c. &c. should be only used at the times already spoken of. To use them at any other period, either after the molimina have disappeared, or during the intervals between them, tends in most cases still further to derange nature, by determining to the uterus at an unseasonable time, when there is no natural tendency to that organ; under such circumstances the very same means will frequently fail and prove injurious, which, applied so as to coincide with the time of the natural effort, would have been successful. To illustrate these principles by an example: we are consulted in the case of a young woman, affected with various hysterical symptoms for several months, and during that period more than usually subject to headach, languor, loss of spirits, diminution of appetite, and irregularity, usually constipation of bowels; she is pale, and complains of various pains and uneasy sensations, and has not menstruated since the accession of these symptoms; here it is evident that the constitutional treatment must be strengthening and tonic; the practitioner will therefore recommend regular hours, much gestation in the open air, a nutritious diet, tepid, and afterwards cold shower baths; he will regulate the bowels and afterwards prescribe a course of tonic medicines, chalybeates, preparations of bark, strychnine, &c. &c.; he will likewise inquire carefully when the last period happened, and when and how often since that occurrence menstrual molimina were observed. He thus ascertains when they should again recur, and contents himself with enforcing the constitutional treatment, until about six days before the calculated time. Then he lays aside the other medicines, and has recourse to those means which determine to the uterus. Two leeches are applied to the inside of the thigh near the labium, every second night, until they have been three times applied. The bleeding is encouraged by stuping. On the intermediate days the bowels must be actively moved by aloetic pills, and for three nights before and after the day of the molimina,* hot pediluvia, rendered stimulating by mustard seed, may be used; during the same time also frictions with stimulating liniments should be applied to the feet and legs every morning, and spirits of turpentine or tincture of cantharides may be exhibited internally, while the necessity of more active exercise is inculcated. The intention of the leeching is to produce a tendency of blood to the part, which tendency is increased by each repetition of the application, and is still further augmented by these applications being made only about the time that the menstrual discharge should have taken place. *If these means fail, they must for the moment be laid aside, and the constitutional treatment must be again resumed until the same number of days before the next period, when the list of remedies above spoken of must be again tried,* and in few cases indeed shall we find them to fail."

We can add our testimony to that of Dr. Graves, respecting the superior efficacy of this over the routine administration of emmenagogues, tonics, and so forth, without regard to the periods that nature has assigned, and the indications of them that she offers. Dr. Graves omits mentioning the hip-bath, which we have found preferable to the pediluvium. Dr. G. observes that two leeches are a fit number for weakly individuals, but in the plethoric, four or six may be used at a time with advantage.

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* "By *molimina* are meant pains in the loins, thighs, and hypogastric region, flushings, colicky pains of the abdomen, increase of headach, and a general feeling of malaise, which are familiarly known among females as indicating a *constitutional effort.*"

Dr. Graves observes that in some young women the tendency to headaches exists without any menstrual derangement, but may be caused by leucorrhœa. When this is the case Dr. G. counsels avoidance of the pediluvia, and the use of the nitrate of silver injection, and he adds that the removal of the leucorrhœa is the first step in the cure, as it causes a series of most distressing symptoms. We must confess that our experience on this head does not altogether tally with that of Dr. Graves. In young women leucorrhœa is usually merely a symptom, and it is not this discharge, but the state of the general habit on which it depends that is the fons et origo mali. It is true that by removing the leucorrhœa we effect much good, but in fact we do not cure the leucorrhœa until we have altered and ameliorated the general health.

Dr. Graves next speaks of headache in young persons of a delicate excitable temperament without any menstrual or leucorrhœal complication.

Such persons are said to be extremely nervous, and are subject to every variety of hysterical seizure, all, however, marked by the violence of the accompanying headache. In some the pain is accompanied with flushed countenance, in others the external signs of cerebral congestion are less evident, but in all, any stimulus, such as wine, aggravates the malady. These patients are often kept awake night after night —they bear active purgation very badly, and loss of blood, whether general or local, as well as blisters, and means of this description, although they may procure a temporary alleviation, do ultimate injury. Dr. Graves alludes to a fact illustrative of this circumstance. A lady had been liable every third or fourth month for the last twenty-five years to a violent fit of epilepsy; about a year ago a young practitioner imprudently bled her, and she has since been subject to an attack every third or fourth week.

Dr. G. observes that we should recollect that the natural tendency of this complaint, when not interfered with by art, is by no means dangerous, although it is, of course, an object to relieve the patient of so distressing a symptom as speedily as possible. The means which Dr. G. employs are these: first, moderately cold applications to the forehead; secondly, attention to the bowels by means of fœtid and terebinthinate enemata, at least once a day; thirdly, attention to the state of the bladder, lest water should accumulate, as it frequently does in that organ; fourthly, extensive, diligent, and frequently repeated dry cupping of the integuments in the vicinity of the head; fifthly, the internal exhibition of spirit of turpentine in considerable doses; sixthly, the repeated use of stimulating liniments to the abdomen and the lower extremities; and, lastly, when the fit has subsided, or other remedies have failed, the *nitrate of silver*, in considerable doses.

"The utility of both nitrate of silver and spirit of turpentine in such cases, was suggested to me by the good effects these medicines are found to produce in epilepsy, particularly when it occurs in persons of a nervous and delicate habit, and since I have employed them in hysterical determination to the head, I have been able to overcome these and similar affections, with much greater facility than formerly: of these, as has been already observed, the spirit of turpentine is best suited to the violent stages of the disorder, and may be given in doses of one or two drachms, to be repeated according to its effects. The best vehicle is cold water; some will bear and derive advantage from two or three doses of this medicine in the day, experiencing from its use a diminution of headache, and removal of flatulence, together with a moderate action of the bowels and kidneys. In some cases, as occurs also occasionally in the treatment of epilepsy, by this medicine, it cannot be persevered in, in consequence of the violent dysuria and hæmaturia it occasions; slighter degrees of these affections should not, however, prevent our continuing it. When the paroxysm has abated, or when the spirit of turpentine has failed, the greatest benefit may be derived from the nitrate of silver continued for five or six days at a time, in doses of half a

grain four times, or even six times a day. When the bowels are constipated there is no better combination than nitrate of silver with minute doses of compound colocynth pill, a formula, I believe first recommended in dyspepsia by Doctor James Johnson, of London, and which I have found invaluable, not merely in the headachs of hysterical young women, but in those of men, particularly the habitual stomach headach, to which delicate and literary men are so subject."

Dr. Graves speaks very highly of dry cupping. In another part of this Journal will be found a brief notice of a valuable paper on this subject in the Lancet, from the pen of Mr. Roberton. Dr. G. recommends that many cups, of tolerable size should be applied at once to the nape of the neck, between the shoulders and below the clavicles, whilst one or two small ones may be applied near the ears. The suction should be powerful, and should be sufficient to fix the cup for at least ten or fifteen minutes. Dr. G. recommends dry cupping in hysterical headache, coma, and delirium, as well as previously to the occurrence of epileptic paroxysms. He mentions cases in point. With reference to hysterical delirium we should state, that our author describes it, as characterised by great nervous excitement, sleeplessness, talkativeness, and delusions, such as supposing persons to be present who are not so, accompanied with a frequent wish to get out of bed in some, while others hide themselves under the clothes, when a stranger approaches.

In such cases Dr. Graves has known the most disastrous consequences result from the depleting system being solely relied on; he recommends the dry cupping as likely to prove a most valuable auxiliary to well-directed internal treatment. Mr. Barker communicated a curious case to our author. A lady of rank was occasionally attacked by violent determination to the head, and each of these paroxysms was sure to induce before it ended a great propensity to suicide, which on one occasion she nearly succeeded in effecting. This strange affection was removed, or rather prevented, by the application of dry cupping as soon as the premonitory symptoms of the paroxysm made their appearance.

EXHIBITION OF OPIUM IN THE FORM OF ENEMA.

Dr. Graves relates two cases illustrative of the efficacy of opium when given as an injection. Singularly enough, the subjects of both cases are medical men. The first was a gentleman worn down with the effects of mercury. He had chronic arthritic swellings, slight rupia, pains, extreme debility, and an utter want of sleep. For two years he had never slept at night without the assistance of an opiate, and he had often taken two ounces of Battley's solution in the day. Very large doses of opium acted on his bowels as an aperient, and it never checked the secretions or induced pyrexia. The treatment pursued by Dr. Graves consisted in the administration of two drachms of the black drop every night —three drops of Fowler's solution three times daily — a pint of sarsaparilla broth—a starch enema, with one scruple of black drop three times daily—a nutritious but mild diet—some wine at dinner. This treatment was attended with the happiest effects.

The other case was one of neuralgia. The gentleman has frequently been compelled to take during the paroxysms 100 grains of opium, which produced disturbance of the secretions, destroyed the appetite, and had sensibly impaired the memory and mental powers. Half a drachm of laudanum used in the form of injection twice or three times daily effectually alleviates his suffering and produces none of the bad consequences alluded to.

We must confess that we have seen opium given by injections frequently fail in producing the same amount of relief with its exhibition by the mouth. Since the publication of M. Dupuytren's opinions on the employment of opiate enemata in delirium traumaticum, it has been the fashion to resort to them. In some instances we have certainly observed great benefit from their admi-

nistration, but in others, as we have already remarked, we have seen them fail. It is always right to make trial of them.

Dysphagia.

We give the following case of hysteria in our author's words; it is equally brief and instructive.

"On the 1st of last September I was called to see a young lady, who was represented to be in a state of imminent danger. On entering the room I found her sitting up in bed, surrounded by several female friends, all in the greatest alarm. Her face was pale, and her countenance indicated a good deal of anxiety. She held in her right hand a cup containing water, which she applied to her lips about every five seconds, and sipped an extremely small portion of the water, which she immediately swallowed with a considerable effort of deglutition, although the quantity was so trifling; she said that she should be immediately choked if she discontinued this perpetual sipping, and she referred to an intolerable uneasiness at the root of her tongue and in her throat, threatening immediate suffocation the moment she ceased to employ herself in swallowing; and so urgent was the feeling that impelled her to this act, that the moment an attempt was made to take the cup out of her hand, she began to scream with agony, was agitated with convulsions, and to all appearances seemed in the last agony. This scene had lasted for several hours without interruption, and the appearance of the principal actress was rendered still more tragical by a black mass of leeches around her throat, and the blood from their bites trickling down her neck. On examining her more closely I found that there was no obstruction whatsoever to the passage of air through the larynx, and that she could make a full inspiration, without any wheezing or noise in her chest; there was no swelling or redness observable at the root of the tongue, or in the fauces. As the young lady was of an extremely delicate and nervous habit, being very sedentary and subject to frequent attacks of common hysteria, I immediately conjectured that her present symptoms were the result of an hysterical affection, and accordingly I removed the leeches, stopped the bleeding as soon as possible, and gave her draughts consisting of camphor, aromatic spirit of ammonia, and black drop, under the influence of which the nervous irritation soon subsided, and she fell asleep."

Dr. Graves makes mention of two other cases of, apparently, nervous dysphagia. A nervous young clergyman consulted him last year on account of debility and dyspepsia, accompanied with a painful and convulsive struggle, as he expressed it, which sometimes took place between the morsel he had swallowed, just before it entered the stomach, and a something that seemed to resist its further passage downwards. This lasted for a few seconds only, but was very distressing to himself and the spectators, and made him shun society. The other case is that of an excellent anatomist, in whom these sudden attacks of temporary dysphagia have become so habitual that he never ventures to eat unless a glass of water be within his reach; in him, the stoppage of the descent of the food is attended with an urgent sense of suffocation.

"In fever I have witnessed several times a very peculiar species of dysphagia, evidently occasioned by flatulent distension of the stomach to such an extent that the lower portion of the œsophagus partook of this condition; at least, I conjecture so, for during the struggle of the dysphagic paroxysm, a gurgling noise was heard, as if the bit of food was met by a portion of air contained in the lower part of the œsophagus; my friend, Doctor Autenrieth, of Tubingon, has particularly remarked this symptom, or at least something like it, in what he calls the abdominal typhus fever of young people; for he says, if the patient takes any drink a peculiar gurgling noise is heard as if the fluid was poured into a lifeless bag. Now, in precisely such a case, Mr. Rumly and I saw a young lady affected, in addition to this noise, with so great spasmodic dysphagia, probably from the entrance of wind into the lower end of

the œsophagus, that she altogether refused to drink. This phenomenon gradually disappeared, and the lady ultimately recovered; but it deserves to be remarked, that in general this symptom and the gurgling noise, described by Dr. Autenrieth, are very bad omens in fever."

The remaining part of Dr. Graves' paper is not possessed of any peculiar interest, and we therefore pass it over. We would make one observation before we conclude. In the earlier days of physic, when morbid anatomy was uncultivated, and when, consequently, medicine had not the degree of exactness which it now possesses, men were thrown solely on the observation of facts, and a vast body of empiric experience was accumulated. We say empiric, because the nature of disease was unknown, and the observation consisted only in the statement of the results of the application of certain remedies to certain symptoms. Much practical truth was, no doubt, obtained; but, as many symptoms constitute only the common language of certain stages of diseases, totally differing in their characters and seat, it followed that much of the experience was fallacious, and men were ignorant why a drug succeeded in one case and utterly failed in another, which, to their eyes, appeared of a similar description. Hence all the vagueness, and much of the opprobrium, of physic.

When morbid anatomy was first explored, and its vast mines of real and solid information opened, men were dazzled by the glare of the wealth around them, and thought that it would suffice for all their necessities and wishes; in other words, they imagined that, to become good practitioners, it was merely necessary to know the real nature of disease, and the structural changes that accompany and occasion symptoms. The example of France is alone sufficient to display the fallacy of this expectation.

The truth is, that both means are necessary to constitute the knowledge available in practice. We should know the seat and the structural nature of disease, or we sink into empirics, and exactness is lost; we should know the effects of remedies on symptoms, as well as on structural lesions, or we become mere barometers of vital changes diagnosticating, prognosticating, doing every thing but cure.

At the present day, these two roads to knowledge may, happily, be joined. Men conversant in the exact truths of morbid anatomy may set themselves to observe the effects of medicines, and we need not say how incomparably superior the record of their experience is, to that empiric jumble of facts and fancies that has descended to us from our forefathers. We now appreciate the effects of remedies with some measure of certainty—we see how far organic lesions are amenable to treatment, and what medicines or means relieve particular symptoms, or sets of symptoms, not dependent on such lesions. In short, we have now a rational and scientific series of experiments, in clinical observation. It is on this account that we have noticed Dr. Graves' paper so fully, and we trust that it will not be the last of a similar description.—*Dublin Journal, No.* VIII.

II. THE WHITES AND THE BLACKS.

WE are not about to discuss the question of emancipation; that is somewhat too political and too polemic. But our attention has been drawn to some remarks on the subject of negro inferiority in our valuable contemporary, the Phrenological Journal for March, 1833.

Many of our readers are perhaps aware that a society has been formed in America for establishing a colony for free negroes, on the Western Coast of Africa, and that this colony has been termed Liberia. It appears that the whole population of the United States is about 13,000,000, and that of these upwards of 2,000,000 are blacks. Of the 2,000,000 blacks about 330,000 are wholly or partially free. Both the slaves and the free blacks are increasing with great and alarming rapidity. It seems too that the free blacks are, generally speaking, a destitute, depraved, and wretched class. Such are the broad facts, and the question arises—in what

way can we best remedy this crying moral and political evil? By emancipation at home, or by deportation to their native continent and native land?

We do not propose to enter on political considerations, but as the question admits of being viewed in a physical or mental light, we shall take the liberty of glancing at it. We must say that we feel disposed to agree with our contemporary in most of the following sentiments and conclusions:—

"Even Mr. Stuart will grant to us, that the actual existence of some millions of blacks in the same community with the whites of the United States, is in itself an enormous political and moral evil. That the black population is, *de facto*, an inferior caste, which, with many individual exceptions, no doubt, is generally degraded, uneducated, and in many instances vicious and depraved; and if it be a scourge to America, the punishment is the natural result of a daring violation by man of a marked appointment of God,—a just retribution for the avarice, rapacity, and cruelty that for ages outraged nature, by tearing the African from the region and the climate for which his Creator had fitted his physical constitution, and mingling him with a race with which incorporation was not designed, if a strong natural repugnance to it is to be received as proof of the Divine intention.

It is wild fanaticism to call this repugnance unchristian, and to denounce a doubt of the power of religion to overcome it as infidelity;—*because* God made all men of one flesh, and Christianity bids us open wide the arms of brotherly love, and take all our brethren of mankind to our bosom. It is a stupid perversion of this religious precept to maintain, that the fulfilment of this duty precludes all change of the Negro's place of residence, and that the American does not in effect hold out to him the arms of brotherly love, by placing him in independence, comparative elevation, and abundance, in another country, instead of degradation and destitution where he is. God made all men of one flesh, but he did not design them all to live in one country, and, however various and unsuitable their aspect and nature, to mix and incorporate. If we look at that well marked and vast peninsula called Africa, we find that equally marked race the Negro, with slight modifications, forming its native population throughout all its regions. We find the temperature of his blood, the chemical action of his skin, the very texture of his wool-like hair, all fitting him for the vertical sun of Africa; and if every surviving African of the present day who is living in degradation and destitution in other lands for which he was never intended, were actually restored to the peculiar land of his peculiar race, in independance and comfort, would even Mr. Stuart venture to affirm that Christianity had been lost sight of by all who had in any way contributed to such a consummation? It matters not to brotherly love on which side of the Atlantic the Negro is made enlightened, virtuous and happy, if he is actually so far blessed; but it does matter on which side of the ocean you place him, when there is only one where he will be as happy and respectable as benevolence would wish to see him, and certainly there a rightly applied morality and religion would sanction his being placed. The incurable evil of the present relation of the whites and the blacks in America is, that incorporation is almost morally impossible. The whites are too numerous in both the sexes, to be driven to intermarriage with the Negroes. Mulattoes are a West Indian, greatly more than an American phenomenon. The distinction in the United States is white or black, with little of the intervening shades of colour. The races do not and will not incorporate. Try the loudest advocate for the 'vincibility' of this prejudice, as it is most unphilosophically called, with this touchstone,—'marry the Negresses to your sons, and give your daughters to Negroes,'—and we shall have a different answer from Nature than we receive from a misplaced religious profession."

We are by no means advocates for negro slavery; on the contrary we abhor it, and the present state of the slaves and the slave-holders is, as our con-

temporary has justly remarked, an eternal lesson to man, that signal punishment must ultimately follow injustice. But we question whether the white man and the black can co-exist as equals in the same land, and if they do not become incorporated, it follows from the nature of things that, sooner or later, a deadly struggle must ensue, a struggle not merely for mastery, but for existence. Many well-meaning persons entertain a different opinion, and they ground it on the belief, that with wise institutions and a good education the black will display an equal or nearly equal degree of mental attainments with the European; in fact, they believe that the white and the negro have originally the same origin, and consequently have originally the same mental capacity. Of their origin we shall say nothing, but we cannot persuade ourselves that the mind of the European and the African are equal, or can, or will, by the utmost stretch of human ingenuity, be ever made so. The difference of conformation between their skulls is so palpable, that all who run may read it. This is a physical difference, and all admit that whatever the mind may be, the physical brain constitutes its organ, and measures its manifestations. We do not know how this grand physical and mental distinction can be done away with, but by intermarriage, by a blending of the races. Is this likely to occur? Many are willing to give the negro the privileges of the man, but few are inclined to receive him as the brother or the son.

History confirms what physical conformation suggests. The negro has never been the dominant but always the depressed race. If, of two wrestlers, one is always down, we may feel assured of his being the weaker.

The belief in negro inferiority constitutes no argument for slavery, unless weakness be a reason for the abuse of strength. But it does appear to constitute a valid argument against an attempt at equalization, for what God has made unlike, man will vainly attempt to assimilate. The experiment must end not only in failure, but in misery and ruin. If it were a question between two people, the conquerers and the conquered, incorporation would, under good institutions, ensue. Such has been the case throughout the greater part of Europe. But when strong religious prejudices or national feelings interfere, incorporation does not take place, and a bloody struggle is the final result. Such is the case with the Greeks and the Turks, such possibly may hereafter be the case in India. We have already said that incorporation of the American and African, or of the Anglo-West Indian and African is improbable in the highest degree. The numbers of the two races must necessarily increase till diminished means of subsistence check it. A contest must then come, and such a contest!

Let the African depart to his native continent, give him freedom, civilization, and then admit him into the family of man as an associate. But we doubt the wisdom of the attempt to amalgamate the white and the black races, and we ground this doubt on their physical and mental differences.

III. DEVELOPMENT OF THE HEAD OF DR. SPURZHEIM.

It has been the fortune of Dr. Spurzheim to see many friends, and still more ardent disciples defend himself and disseminate his doctrines, and the latter have taken deep root and gained extensive credit during his life-time. Whatever may be the fate of the details of the science, whether the localization of the organs be correct, or whether an exact localization be attainable, matters little in comparison with the triumphant establishment of its great principle, the plurality of organs. We say triumphant establishment, for the arguments of those opposed to it have utterly failed to check its progress and a blow has been struck at the doctrine of the indivisibility of the mind, which it never can recover. But it is not our object at present to enter upon any phrenological discussion; we wish only to lay before our readers the phrenological admeasurement of the head of the late Dr. Spurzheim.

DEVELOPMENT.*

1. Amativeness, full or ra. large..	15
2. Philoprogenitiveness, large....	18
3. Concentrativeness, ra. small ..	8
4. Adhesiveness, rather large....	16
5. Combativeness, rather full....	12
6. Destructiveness, very large ..	20
7. Secretiveness, large.....	18
8. Acquisitiveness, rather large ..	16
9. Constructiveness, ditto	16
10. Self-Esteem, large	18
11. Love of Approbation, ditto, or very large	19
12. Cautiousness, rather large, or large	17
13. Benevolence, very large	20
14. Veneration, ditto.....	20
15. Firmness, ditto.....	20
16. Conscientiousness, rather large, or large	17
17. Hope, rather full, or full	13
18. Wonder, full, or rather large..	15
19. Ideality, rather large	16
20. Wit, rather large, or large....	17
21. Imitation, rather large	16
22. Individuality, large.....	18
23. Form, rather large, or large ..	17
24. Size, large	18
25. Weight, full.....	14
26. Colouring, rather full, or full..	13
27. Locality, large.....	18
28. Number, rather full, or full....	13
29. Order, rather large.....	16
30. Eventuality, full	14
31. Time, large	18
32. Tune, large	18
33. Language, ra. large, or large..	17
34. Comparison, very large	20
35. Causality, very large	20

MEASUREMENTS.

	Inches.
From Occipital Spine to Individuality	7⅛
Concentrativeness to Comparison	7⅛
Ear to Occipital Spine	4⅛
—— Individuality	5⅛
—— Firmness	6⅛
—— Benevolence.....	6
Destructiveness to Destructiveness	6⅛
Secretiveness to Secretiveness ..	6⅛
Cautiousness to Cautiousness ..	5⅛
Ideality to Ideality	5⅛
Constructiveness to Construct...	5⅛

* "The numbers on the right indicate the size of the organs according to the scale adopted by the Phrenological Society, and described in Combe's System, p. 95."

We need scarcely inform our readers that this excellent man and able philosopher died in America, while engaged in delivering a course of lectures at Boston. His death took place on the 10th November, 1832, after an illness of about three weeks, induced and fatally kept up by his exertions. The symptoms were those of continued fever, and, unfortunately, he refused all active treatment, and displayed, as too many of high intellectual attainments do, that species of irritability, which often sets medicine and nature also at defiance. On examining his body, there were merely some traces of increased vascularity discovered in the arachnoid and pia mater, with adhesion of the colon to the peritoneum in the right iliac fossa.

There is a brief, but very interesting account of his life in the Phrenological Journal. Mr. Holm is preparing a more extensive biography.—*Phrenological Journal, No.* XXXV.

IV. The Pathology of Purpura.

Mr. Gardner, of Glasgow, has written a paper on this recondite subject, in the Glasgow Medical Journal, for April of the present year. After discussing all the theories that have hitherto been offered, he proposes his own views, which we fear are as open to criticism as those of his predecessors.

Dr. Hannay, Professor of Physic in the Andersonian University, has asserted that the disease is always produced by chronic inflammation of the veins, verging more or less to an acute form; and he grounds his opinion on the fact that in three successive dissections of patients who died of purpura, the veins were found in a high state of disorganization, evidently the result of inflammatory action, the larger trunks having been, as he maintains, lined with a coating of purulent matter. Now this is the theory advocated by Mr. Gardner, not from dissections wich he has made, not, in short, from positive

facts, but from the following considerations. First, that the constitutional symptoms of phlebitis and those of purpura bear "a close resemblance." Secondly, that in some cases of phlebitis, petechiæ or vibices have been observed. He concludes that it is rather the capillary than the large venous trunks that are affected — that the diseased state appears to extend in some degree to the other tissues—and that purpura is of course an inflammatory disease. Such is a short summary of Mr. Gardner's theory.

It is enough to reply to this hypothesis, that no proof of its correctness is brought forward. Mr. Gardner affirms, that in purpura there is inflammation of the capillary veins, but has not brought forward one case in which dissection has shewn such an affection. In the only cases in which phlebitis existed we are told that there was pus in the larger trunks.

We do not attach much importance to the analogy between the constitutional symptoms of phlebitis and purpura, on which Mr. Gardner dwells. We have witnessed very many cases of phlebitis, and not a few of purpura, but we never perceived the resemblance in question. The symptoms of phlebitis are ordinarily those of typhus; the symptoms of purpura are either inflammatory, or those of debility and deranged health, but seldom actually typhoid. So much with regard to the pathology, which can be firmly and satisfactorily established by dissections only, and not by speculations, be they ever so ingenious.

Mr. Gardner appends two cases which have recently fallen under his observation. They are short and possessed of practical interest; we will therefore take the liberty of extracting them.

"On the 23d May, 1831, I was called upon to visit a young man, aged about 17, a silk weaver. He had a pale and exsanguineous appearance, though not much emaciated, and complained of much debility, accompanied with pain of head, lumbar region, and extremities. His neck, breast, and extremities, but particularly the upper, were studded with petechiæ of various sizes, but none larger than a split pea, some of a red, and others of a purple colour, each with a small white dot in its centre, and remaining unchanged by pressure. None of these spots were to be seen on the mucous membrane of either mouth, nostrils, or eyes. Pulse 104, full and bounding; respiration hurried, and accompanied with a slight cough; skin hot and dry; tongue pale red round edges, but covered in middle with an orange-coloured fur. The gums appeared to be ulcerated, and discharged blood on pressure; bowels open, but the stools were dark and fetid. The petechiæ had made their appearance about six months before I saw him, but up to that time was not prevented from following his usual occupation. He had, however, during that period, several attacks of hæmorrhage from the left nostril, which always ceased spontaneously, without much loss of blood. For a few days previous to my visit, the petecheiæ had been increasing in number, with an accompanying increase of debility. His diet had generally been of a nutritive quality, nor had he been too much excluded from out-of-door exercise.

He was bled to ℥x. immediately after which he became sick, and vomited. A saline purgative was ordered to be taken as soon as the stomach became quiet. Next day I was informed that early that morning an epistaxis took place from left nostril, which was stopped by a neighbouring surgeon, by plugging, after the loss of several ounces of blood. The pain of head was gone; pulse 96, and soft; and expressed himself as feeling better than he had done for some days. The blood taken from the arm coagulated without the separation of serum, and presented a pale red transparent jelly-like appearance, extending to the depth of a fourth of an inch, all under which was coal black. When the clot was broken down a sufficiency of serum was given out. He continued much in the same state under the use of tonics and purgatives till the 31st, when, in consultation with Dr. Hannay, he was found to complain of much headach; skin hot and dry; pulse 112,

full and strong, and there was a continual oozing of blood from the left nostril, which was still plugged, and from the gums. There was much thirst and no appetite. From this condition it was judged advisable again to abstract blood, ʒxij. were accordingly taken with very considerable relief. The blood had altogether the same appearance as the former, with the exception of the coagulum being much firmer. Up to the third day from this time, there was great reason to believe that he was recovering. The appetite was considerably improved; the petechiæ were beginning to disappear, and the stools had nearly acquired their natural colour and consistence. These symptoms of improvement, however, speedily gave place to a state of much debility, which continued to increase, accompanied with a low muttering delirium for the two last days, and he died on the morning of 10th June. I regret that I had not an opportunity of examining the body.

About a month afterwards I was requested to visit a sister of his, Mrs. G. aged about 30, of a full and plethoric habit. I found her complaining of languor and lassitude, with slight pain in the lumbar region and thighs. On her breast and arms were scattered a number of petechiæ. They had existed for two days, and were very similar to those of her brother. Her gums were soft but discharged no blood; nor had any hemorrhage taken place from the other passages of the body. Pulse 96, very full. Tongue white. Bowels open. Blood was drawn to the amount of ten or eleven ounces; and she was ordered a dose of sulph. mag. In a few days she had completely recovered her strength, and the whole of the petechiæ were gone. The blood was cupped, and had the buffy coat."

If our readers consider the foregoing cases attentively, we think they will come to the conclusion, that the treatment adapted for one was not adapted to the other. In the first case, the bleeding appears to us to have been decidedly injurious, and, independent of other circumstances, the state of the blood abstracted in the first instance would have made us hesitate before repeating the venesection. This patient was pale and exsanguined, much debilitated, and had been affected for six months. The second case was that of a female of "full and plethoric habit," recently attacked, with a pulse 96 and full. We need not be at the trouble to insist on the difference of circumstances in these cases, nor can we be surprised at the different result.

We conceive that these two cases present a key to the disputes that have arisen on the treatment of purpura. In some instances, we meet with a very plethoric state of system, and in them a moderate degree of depletion is sometimes beneficial. In other instances, and we believe that they constitute the majority, the state of system is any thing but plethoric, and bloodletting is injurious. We saw a remarkable instance of the injurious effects of bleeding. A man had petechiæ on the lower extremities. He did not appear much debilitated, and he was bled without relief. The bleeding was repeated, when immediately the petechiæ increased in size on the left foot, and, although port-wine and bark were immediately given, the foot became black, cold, dead, and subsequently separated at the ankle-joint. We saw another patient with purpura die almost immediately after depletion. We believe that the best treatment is moderate purgation, accompanied with the mineral acids. The infusion of roses, with sulphate of magnesia and the dilute sulphuric acid, with occasionally a dose of calomel, unirritating diet, and the use of tonics, or even stimulants, when the motions become natural and the digestion good, have formed, in our experience, the best mode of treatment. There are circumstances to be attended to, of course, in the individual case—one patient requiring more support, another more antiphlogistic treatment; but we fear that the practitioner who sets out with the determination to treat purpura generally by bleeding will inflict a great amount of mischief.

V. RESTORATION OF VISION, IN CASES OF STAPHYLOMA AND INCURABLE OPACITY OF THE CORNEA.

Mr. Nimmo has written an able paper on this subject in our Glasgow contemporary. His object is, to point out the means that have been recommended by German surgeons, and to weigh their comparative merits. We will glance at the operations, which are three in number. The first consists in a removal of a portion of the iris, adherent to the posterior surface of the cornea, in staphyloma;—the second, in the formation of an artificial pupil in the sclerotic;—the third, in the removal of the opaque cornea, and in substituting for it a pellucid cornea, transplanted from one of the lower animals.

Dr. Ammon, of Dresden, was led by considerations, to which we need not particularly allude, to propose the first operation in cases of staphyloma. By means of a hook, introduced into the eye through an opening made in a part of the cornea or sclerotic, at some distance from the most transparent part of the cornea, he proposed to separate more or less of the iris from the cornea, and thus enable the patient to distinguish the light more readily, if not to see. He tried this experiment in one case only, which proved unsuccessful, from chronic inflammation arising, and rendering the part more opaque than before. Mr. Nimmo mentions another case in which the operation has been tried, with indifferent success.

"To this limited experience, I am able to add but one case, which gives little encouragement to a repetition of such attempts. Archibald Gilchrist, nineteen years of age, was admitted a patient at the Eye-Infirmary, on the 12th November, 1832. He stated that he had suffered from small-pox about seven years ago, since which period vision has been totally extinct, a perception of light and shade alone remaining. The right eye was found to be totally destroyed, while the cornea of the left was in a staphylomatous condition. The cornea was white and opaque over three-fourths of its surface, a small portion towards the upper and nasal edge retaining a partial transparency, so that the iris was seen in contact with and apparently adhering to its posterior surface. This case was one which might have been pronounced decidedly hopeless, but it was determined to give the patient a chance of recovering a certain degree of vision, by removing as much as possible of the iris from behind the most transparent part of the cornea. A small incision was made through the lower part of the cornea, through which a hook was introduced, and an attempt was made to lacerate and remove the portion of iris already alluded to. It was found to be firmly adherent to the cornea, and it was not easy to say how much was separated, as some blood was effused and obstructed the view. The operation was not followed by any bad consequence; the wound in the cornea healed rapidly, and only slight pain was complained of for a day or two. In order to promote the absorption of the lacerated portions of iris, the tincture of iodine was given to the extent of thirty drops daily; and after the irritability which followed the operation had subsided completely, the solution of nitrate of silver was dropped on the eye once a day, in order to render the cornea, if possible, somewhat more clear. After a short time the patient left the hospital. The place where the iris had been lacerated was still opaque, and presented a dark mottled aspect. No improvement in *vision* had resulted, but the patient thought that his perception of light was somewhat increased. He was directed to continue the remedies for some time, and it is possible that some further improvement may take place."

This operation, unsuccessful as it has proved in these instances, is inapplicable to conical and racemose staphyloma, so that we need not expect much from it.

The second means—excision of a portion of the sclerotica, was originally suggested by the elder Autenrieth, who performed it on cats with much apparent success. We say apparent; for, as he killed the animals on the fourteenth day, a circumstance which

has since been found to prevent the success of the operation, it could not be observed in that brief period. The first operator on the human subject was Dr. J. B. Müller, at that time surgeon to the Ophthalmic Hospital of Reusberg. The patient was a soldier, who, in consequence of the Egyptian ophthalmia, had the left cornea staphylomatous, and the right entirely leucomatous. The operation proved unsuccessful, a white opaque membrane gradually forming in the wound, and the patient becoming as blind as before. The experiment has been repeated by Beer, Himly, and Mr. Guthrie, without success. Dr. Ammon has made several attempts to restore vision in this manner, and Mr. Nimmo has extracted three cases from that author's work. We will give the first and the third, as samples of the difficulties and the results.

"Case 1.—On the 18th September, 1829, Dr. A. made his first attempt at the formation of an artificial pupil in the sclerotic, in presence of Dr. Martini, of Lubeck, Dr. Dieffenbach, of Berlin, and Doctors Hedenus and Hille of Dresden. The patient was a boy, 13 years of age, who had lost his sight soon after birth from ophthalmia neonatorum. The cornea of the right eye was staphylomatous, that of the left was rendered opaque by general leucoma, almost depriving him of even the perception of light. As there was a possibility of doing the patient good, and none of rendering his condition worse, it was determined to form an artificial pupil in the sclerotic of the left eye. The upper eyelid being raised by an assistant, and the eyeball being fixed by introducing a small hook through the conjunctiva close to the edge of the cornea, a semicircular incision was made with a cataract knife through the conjunctiva, near the temporal side of the cornea. The flap was dissected back with the curved scissors, and the bleeding, which was considerable, was suppressed by the frequent application of cold water. The flap of conjunctiva being held back by the assistant with a fine pair of forceps, Dr. Ammon now took a narrow-bladed knife, which he calls a *sclerotome*, and thrusting it through the sclerotic close to the base of the flap, carried it outwards to the distance of four or five lines, and then turned it downwards so as to form a flap. At this moment the patient made violent struggles to get free, the eye escaped from the hook, the lens, with a considerable quantity of vitreous humour, escaped through the wound, and the eyeball collapsed. The flap of sclerotic which had been formed was now removed with the scissors, and was found to bring along with it a part of the choroid coat. The bleeding which followed was not profuse, but continued for a considerable time, and finally yielded to the cold applications which were employed for the purpose of preventing subsequent violent re-action. No inflammation followed this operation. In the course of the next day the eye had recovered from the collapse, and was again distended with the humours. The edges of the opening in the sclerotic were turned somewhat inwards, and the flap of the conjunctiva had shrunk up, so as to leave uncovered a considerable portion of the opening. Round the wound of the conjunctiva was considerable ecchymosis. On the fifth day after the operation, the edges of the wound of the sclerotic began to suppurate, and the opening assumed a longish and narrow form, instead of its former quadrangular shape. A fine silver probe was easily introduced into the wound; this communicated to the patient a disagreeable sensation, and its removal was followed by the escape of some clear fluid, followed by a few drops of blood. Before this took place, the patient remarked that he could distinguish some large body in front of him. He could also perceive the motions of a hand before him, but could not distinguish the form of it. The flap of the conjunctiva had shrunk entirely, and covered no portion of the opening. From this period the wound gradually contracted, a fine membrane, subsequently becoming white and opaque, filled it up, and in the course of a year, the following was the condition of the patient:—'The eyeball was on the whole somewhat smaller than

formerly, particularly in its upper portion. The place where the operation of sclerotomy was performed, presented a longish cicatrix of an ordinary aspect, covered by the conjunctiva. There was no unusual vascularity on the site of the cicatrix or around it. The sensibility of the eye to light was neither increased nor diminished.'"

"CASE 3.—The patient was a young man, nineteen years of age, whose eyes were affected with conical staphyloma of the cornea, in consequence of an attack of puro-mucous ophthalmia in infancy. It is unnecessary to describe the steps of this operation, which was in almost every respect similar to the other. Immediately after the operation, the patient had a distinct perception of light; the bleeding was easily checked, and the flap of the conjunctiva was readily brought over the opening in the sclerotic. Cold applications were used, and neither inflammation of the eyeball nor of the eyelids followed. Next day, a prolapsus of the vitreous humour was observed, which was clear and transparent. The flap of the conjunctiva had rolled back, and lay at the upper part of the opening. In a few days the surface of the prolapsed portion of the vitreous humour began to lose its transparency; it was covered by a thin, white membrane, to which minute vessels were seen to pass. This gradually became more and more opaque, and became continuous with the conjunctiva, while the humours from behind pressed it forwards, and gave it very much the appearance of a staphyloma of the choroid. The eye remains in this condition, and the patient expresses himself sensible of a considerable increase of perception of light, and has frequently expressed a desire that a similar operation should be performed on the other eye." *

Few patients will be likely to submit to this operation, for the small chance of a modicum of vision which it offers. But it has been attempted to modify the operation, in order to obtain a transparent cicatrix in the sclerotica. Dr. Ammon has proposed to remove a portion of the sclerotica from behind, so that the conjunctiva shall never be opened at the site of the artificial pupil. This, he thinks, may be effected by a needle, with a cutting edge, introduced at some distance from the site of the intended opening in the sclerotic, care being taken to avoid cutting entirely out through the conjunctiva. So far as Mr. Nimmo knows, this operation has never been tried.

Dr. Wutzer, professor of surgery in Bonn, has proposed another modification. He would make the opening in the sclerotic in the original way, then pare away a thin piece from the surface of the cornea at its most transparent portion, and, leaving it attached by a single point, turn it round as in the operation of making an artificial nose, fit it to the opening in the sclerotica, and secure it in its place with a fine suture, in the hope of its adhering and remaining transparent. Mr. Nimmo is not aware of this having been tried, and the operation does not promise much.

The third operation which has been proposed for opaque cornea, is its removal and the transplantation of the transparent cornea of one of the inferior animals. It was suggested by Reisinger, has never been tried on man, and has not succeeded in brutes. D. Dieffenbach, fearing that the transplanted cornea would not unite, offers a modification of the operation. He leaves the original cornea untouched in the first instance, makes an incision *round* it through the conjunctiva, fits into this the edge of the cornea of a pig, and secures it with a fine suture. Should adhesion take place, an incision is to be made through the artificial cornea, and a portion of the opaque cornea to be removed with the knife and scissors.

We need not be at the pains of discussing these suggestions. This joiner's work is not altogether adapted for the eyes of living persons.

* "Another case, in which the operation was performed by Professor Ulmann of Marburg, is recorded in the second volume of Ammon's Zeitschrift für die Ophthalmologie, p. 123. The result was similar to that of Dr. A.'s cases."

VI. Case of Abscess of the Kidney and of the Cerebellum.

The only method of arriving at accuracy of diagnosis in cases of diseases not attended with prominent and easily intelligible symptoms, is a careful study of particular facts. For this reason we notice two cases reported by Mr. W. Maclean in our Glasgow contemporary for January of the present year. The first is one of collection of pus in the kidney; a disease extremely obscure, and not seldom fatal.

William Semple, aged thirty-eight, farm-servant, of sallow complexion, consulted Mr. Maclean Aug. 22d, 1827, for what was considered a disease of the liver, under which he had laboured for nearly two years. Complains at present of frequent attacks of nausea, with vomiting of bilious matter.—Tongue coated, bowels torpid; dejections of a clayey colour; troublesome thirst, skin hot and dry, pulse varying from 70 to 80 in the minute. Urine voided with pain, and in very small quantity, depositing a muco-purulent sediment. Has a feeling of pain over region of right kidney, and is frequently seized with rigors over the whole body. Has also been troubled of late with a short tickling cough, attended with purulent expectoration, and occasional pains in different parts of chest. Complaints began about two years ago, during which he has consulted a variety of medical practitioners, and has been frequently bled, blistered, and purged. He has also taken mercury to a great extent, but with very little benefit.

He was bled, ordered purgatives, with opiates and digitalis, and the hydriodate of potass ointment was rubbed into the right hypochondriac region. The pectoral symptoms were relieved; the pain in micturition and deposite in the urine continued, as did the pyrexia. Emaciation made progress during the Winter, temporary mitigations of the symptoms took place, but hectic and diarrhœa conspired to carry him off on the 8th April, 1828.

There were tubercles in the lungs—an abscess containing four ounces of pus in the left—the liver enlarged, indurated, with an appearance of numerous small ulcers on its surface—thickening of the mucous coat of the rectum, and contraction of its pyloric orifice—"considerable disease" of the colon and rectum—right kidney adhering to the peritoneum, and containing in its substance about ten ounces of purulent matter—cavity of ureter much enlarged and its coats thickened—urinary bladder contracted.

The symptoms in the foregoing case, which seem referable to the state of the kidney, are the pain in *micturition*, pain in the region of the kidney, deposition of muco-purulent matter from the urine, perhaps the occasional rigors. There are few diseases in the diagnosis of which blunders are more frequently committed, than in that of disease of the kidney. We would wish to direct attention to one or two circumstances. In the first place, pain, referred to the *urethra*, is not an uncommon symptom of disease of the kidney. The patient has all the symptoms of what has been denominated absurdly enough, "irritable bladder"—the presence of calculus is suspected, but on sounding no stone is felt. In other instances there are no very prominent symptoms. The patient has hectic, pain in the back, supposed to depend on diseased spine, or functional derangements of no decided character. Suddenly he is attacked with low typhoid symptoms and coma, and he dies. We have seen cases of either description. The state of the urine should always be carefully attended to. It is mostly albuminous, and commonly acid. Not that albuminous urine is decisive as to the existence of disease of the kidney, but in abscess of the kidney it most frequently contains albumen.

The other case is one of abscess in the cerebellum. It is so brief that we will give it in Mr. Maclean's words.

"Mrs. Watson, a pauper, aged 80, complained for several years of violent continued headach, accompanied with tinnitus aurium, impaired vision, and occasional vertigo, with partial confusion of mental faculties. Although the headach was constant, she had besides occasional darting pains of a more se-

vere nature in the head, and she was subject to frequent rigors, and a constipated state of the bowels. For these symptoms she had the usual routine of practice, leeches, blisters, purgatives, &c., but with partial relief only. For a few days before her decease, the symptoms were aggravated; the vertigo was so great that she was unable to walk without staggering, and nearly falling. She complained of a great weight in her head, so that she could with difficulty raise it from the pillow. In one of the attempts to raise herself she fell forward to the ground in a state of complete insensibility. I found her with stertorous breathing, dilated pupil. slow oppressed pulse, and all the other symptoms of compressed brain. The jugular vein was immediately opened, and twenty ounces of blood drawn off; her head was shaved, and a blister applied to the scalp; but these means were unavailing, she continued insensible, and expired in a short time.

Autopsy.—The head was opened fourteen hours after death. On removing the skull-cap, about four ounces of extravasated blood escaped. The dura mater and tunica arachnoidea were preternaturally thickened, and covered with numerous small tubercles about the size of peas; one about the size of a kidney bean was attached to the falx. The contents of these, when cut into, were of a cheesy consistence. Surface of tunica arachnoidea was coated over with a covering of coagulated lymph. Whole of cerebrum unusually vascular; right hemisphere, throughout its whole extent, in a softened state. Lateral ventricles nearly filled with serum. In substance of right lobe of cerebellum, an abscess existed, containing two ounces of purulent matter. Basilar artery was found ruptured, and medulla oblongata coated with lymph."

The only characters which seem to have marked the existence of abscess in the cerebellum, are the long-continued head symptoms, accompanied with *rigors*. It is fair to observe, that abscess in the brain is not always accompanied with rigors. The Editor of this Journal published a case in which abscess of the cerebellum was attended during life with uncontrollable vomiting. On the whole, however, we may lay down a practical rule in diagnosis, which will very often serve us at the bed-side—that if symptoms of disturbance or disease of an organ be attended with fever of a hectic character, and particularly if accompanied by rigors, we may venture to suspect the existence of suppuration in that organ, or that kind of inflammation which is apt to terminate in the formation of pus.

VII. SALUTARIUM IN THE WESTERN HIGHLANDS.

A HIGHLY respectable and well educated physician, long resident at OBAN, in Argyllshire, proposes to accommodate in his own house a few invalids, labouring under dyspeptic, nervous, or other complaints, for which a mild but bracing air, in a most romantic locality, might be recommended during one, two, or three months of the Summer or Autumn—and that on moderate terms. It may be proper to state, that Oban is a small seaport town, on the western coast of Argyllshire, beautifully situated on a bay of the same name, and exactly opposite to the Sound of Mull, the now classic scene of Roderick, Lord of the Isles. Twice a week, three steamers and a stage-coach arrive at and start from Oban—one to and from Glasgow—another to and from Inverness—a third to and from the Islands of Staffa, Iona, &c. while the stage comes in from and returns to Inverary, crossing Loch Awe, and passing through some of the most picturesque scenery in the Highlands. The facilities thus afforded to the invalid of seeing all the most interesting localites in the Highlands, with little expense, while regaining health and strength, are singularly concentrated in the little port of Oban. This part of the Highlands is remarkably healthy, phthisis being nearly unknown, and the variations of temperature being very limited, in consequence of the great predominance of sea over land. There are abundant opportunities for fishing and

and shooting in every direction, and the place appears to us (and we have carefully examined its medical topography) to be highly calculated for the restoration of health, as well as for gratifying the senses by scenes of the most romantic and sublime character.

The physician's plan is—"to make frequent excursions with his inmates, of from a day to six or eight days' duration, sometimes by steam-boat, sometimes by land—and frequently in a row-boat or pinnace in the neighbourhood—to all the most interesting scenery in the country—scenes so varied and extensive, that some months might be very pleasantly spent in surveying it."

From some experience, we can confidently assure our professional brethren that a SALUTARIUM of the kind in question, with the advantage of an intelligent physician to attend to the health of an invalid, would be more likely to do good, in a great many disorders, than a tour on the Continent, and that at a comparatively trifling expense. The best season for the Highlands is from the 22d June till the middle or latter end of September—and we strongly recommend the plan proposed by Dr. Aldcorn, of Oban, whom we personally know to be a gentleman of excellent principles, and a physician of skill.

VIII. DR. BABINGTON.

THIS venerable physician and excellent man has paid the debt of Nature, at the advanced age of 76, being the oldest physician, in actual practice, in this metropolis. He may be said to have died "with harness on his back," having, as we understand, been engaged in attending others, though labouring under the epidemic himself, till within 24 hours of his end! There were proofs, on dissection, of acute pleuritis in the chest; and this affords one instance, out of hundreds that might be cited, where actual and acute inflammation accompanied the influenza, and was allowed (from theoretical and newspaper oracles) to ravage vital structures till a fatal disorganization took place!

Of the particulars of Dr. Babington's life we know too little for a biographical memoir—indeed few physicians present materials for such compositions, that are of much interest. Dr. B.'s professional career must have been spread over full half a century, and he reaped a rich harvest in that time. Distinguished more by the amiable qualities of the heart than by any striking talent of the mind, Dr. Babington will be more deeply regretted by his personal friends than remembered, or referred to, by his professional posterity. He put on record nothing that will long survive himself. There can be little doubt, indeed, that this most excellent man owed much, if not all his success, to the heart rather than to the head. This excellence of moral disposition, with even an average share of talent, is almost certain to succeed in the end; for when a physician attains a certain age and public standing, his sanction is very generally sought by his professional brethren in all difficult cases, where there is a certainty of honorable conduct on his part. Those MANŒUVERERS who think themselves mighty clever, if they can wriggle themselves into a little practice, at the expense of their neighbours, are short-sighted mortals. Such was not Dr. Babington. He was not the man who, by act, word, or look, would injure the ordinary medical attendant, when called in at any period of the disease. There are but too many whose very nature seems to irresistibly impel them to raise themselves on the shoulders of their brethren, by little, mean, and illiberal tricks.—Every man's observation has furnished him with melancholy proofs of this fact!

That Dr. Babington, in the early and middle periods of life, was a good and even a distinguished practitioner, we can very easily believe; but, during the last fifteen years, our own impression was, that he was very inert and feeble in his treatment of diseases, and that he almost entirely ceased to keep pace with the pathological advances in medical science. This is so generally the case, as life advances, that we must not venture to censure the dead for par-

ticipating in the failings of human nature. We think, however, that it is the *duty* of the medical practitioner, of whatever denomination, to continue to *learn*, while he continues to *practise* his profession. It is hardly fair to derive emolument from a science which we have ceased to cultivate. It must not be said that an old physician has nothing to learn—that his ample experience has furnished him with all the knowledge which can be needful or applicable to his daily pursuits. Quite the contrary. As our faculties fail, or become more obtuse, our diligence, both as regards observation and study, should increase, to make up for the defects of age. It has often been a matter of regret that medical men have clung to the practice of their profession, long after the proper and natural period of retirement; but it must be pleaded in excuse, that old habits are not easily changed or shaken off, and that retirement from the pursuits of a long life is little less than a descent into the tomb before death! As regarded the lamented deceased, however, we think he was just as well qualified to practise his profession in 1833, as at any time during the last fifteen or twenty years. We met him in consultation not many months before his death, and could perceive little deterioration of intellectual power, excepting, perhaps, in the memory. Dr. Babington's professional life must have been a very happy one; for he was never embroiled in any literary disputes, and lived on the most friendly terms with all his contemporary practitioners. His temper was remarkably cheerful, and his manners exceedingly mild. That he never knowingly injured, or even offended a fellow-creature, in this world, we firmly believe—and we have reason to think that, in all the duties of father and friend, Dr. Babington was most exemplary.

His promotion to the Fellowship of the College of Physicians did no honour to himself, and no credit to the College. He must have been past the common range of human existence, when that haughty aristocracy gathered him—not to his forefathers, but to his step-fathers—not to benefit themselves, but to injure the body of licentiates, by snatching from that unhappy class any thing which they considered calculated to embellish it! It was a great pity that Dr. Babington did not imitate the high-mindedness of his senior and contemporary, Sir Gilbert Blane, in disdaining to descend from the head of the list of Licentiates to be tagged on to the tail of the Fellows! It shewed a great weakness of mind in Dr. Babington, at his time of life—a failing, indeed, which his warmest friends will scarcely be able to negative. But on this disagreeable subject we shall not dwell. Among the titles to our respect and esteem which Dr. Babington has left behind him, few, indeed, who possess any spirit of independence, will enumerate that of "Fellow of the Royal College of Physicians," conferred when the race of life was run, and when one foot was in the grave!

Dr. Babington was one of the very few eminent physicians or surgeons who have deigned to bequeath a legacy to their profession, in the shape of a son. A Hunter, a Baillie, a Cruickshanks, a Halford, a Warren, a Cooper, an Abernethy, cum multis aliis, despised too much the profession by which they rose, to debase any of their offspring by connexion with the ignoble practice of physic! We must, indeed, except our good friend Sir Astley from this censure, for many reasons—one of which, at least, will be considered a *legitimate* one—namely, that he had no son to bring up to his own profession. He has, however, given us so many young Coopers in surgery, besides his talented nephew, that we have no right to complain. Still the circumstance, to which we have alluded, is a very remarkable one, and serves, we think, to prove, incontestibly, that medical science is not so much respected by its most illustrious professors as it ought to be!

IX. On Hysteralgia, or Irritable Uterus. By Dr. D. Davis.

In that very excellent work now publishing in parts by Dr. Davis, we find an article on hysteralgia, which we

deem worthy of notice. The term was first given to the complaint by the late Dr. Gooch, having previously gone under the names of "painful menstruation"—"uterine irritation"—"chronic inflammation of the uterus," &c. Dr. Gooch's description of hysteralgia is adopted by our author, who next proceeds to criticise the theory of Dr. Gooch, who considered hysteralgia as a purely functional disorder, unconnected with inflammation, and not ending in any change of structure.

"This plausible theory, (says Dr. D.) of an exquisitely painful disease, without the co-existence of inflammatory action of the affected organ, must at best, in the present state of our knowledge, be considered doubtful as to its correctness. It is not even certain that we are yet acquainted with all the possible forms of inflammation, so as to be competent to assert broadly and emphatically that this or that variety of inflammation should have a natural and necessary tendency to end in disorganization of structure. It is not easy to conceive of certain forms of rheumatalgic affections, for example, such as lumbago and sciatica, without connecting with them the idea of an inflammatory condition of the tissues principally concerned; and yet on that account, who ever supposes that such inflammatory actions have a natural and necessary tendency to end in malignant disorganization of structure? If muscular fibres be a constituent tissue of the uterus, why might not such fibres become the subjects of a painful inflammatory affection, a truly rheumatalgic affection, without being followed, any more than in the other case, by a malignant disorganization of structure? It is well known that the uterus is not unfrequently the subject of very painful states, occasioned exclusively by functional causes, as we see constantly exemplified in cases of disordered menstruation, leucorrhœa, etc.; but does it necessarily follow, that such morbid conditions are essentially independent of all inflammatory action? Or rather, is it not demonstrable that of some of them, at all events, inflammatory action is an essential attribute? And yet we find that such painful states, such demonstrably inflammatory affections, may be sustained for many years without producing malignant disorganization of structure. The limits subsisting between the phenomena respectively of irritation and inflammation, are not yet established with sufficient precision to enable us to determine with perfect confidence under which of these heads some doubtful forms of disease should be classed. Many diseases, loosely attributed to irritation alone, are often characterized by symptoms which a more accurate diagnosis would enable us at once to ascribe to actual inflammation. In the description of the irritable uterus as above quoted, we encounter several symptoms which are known to be constant accompaniments of inflammatory action. All the occasional causes of the disease, as enumerated by Dr. Gooch, as well as the greater number of its essential symptoms, would seem to lead to the supposition of a proximate state of parts, if not actually inflammatory, at least one of no inconsiderable vascular congestion; for in addition to a morbid state of the nerves of the affected organ, which is not disputed, there is also unquestionably a morbid over-distension of its blood-vessels during the presence of this disease: and this is, after all, the point of greatest importance practically to attend to, inasmuch as it bears immediately on the principal feature of the treatment to be adopted. The designation given by Dr. Gooch of 'the irritable uterus' to the distressing malady which he has here so admirably described, is therefore so far objectionable, as it leaves out of view one of its original, and perhaps its very principal constituent, viz. A PAINFUL OVER-PLENITUDE OF A PART AT LEAST OF THE INTERNAL ILIAC AND PUBIC SYSTEMS OF BLOOD VESSELS. Such a condition of the blood vessels in question is more or less an obvious result of the occasional causes by which the disease is represented as being most frequently produced. It is promoted and exasperated by whatever exertions or other causes which may be supposed calcu-

lated to increase the over-distension of the uterine vessels. The author recollects the case of a painful affection of the right foot, which was incurred by a gentleman some eighteen years ago by over-exertion in walking. At first the pain was considerable, and greatly interfered with the gentleman's pursuits; which required much personal activity. It was subject, like that of the irritable uterus, to occasional abatement, according to the degree of rest which could be afforded to the affected limb, and to more or less exascerbation, according to its exposure, which, indeed, was unavoidable, to more or less of walking exercise. It was, however, at no time so severe as to render walking totally impracticable. For this reason the case was almost entirely neglected in the beginning. It consequently became a chronic affection, which, although it gradually abated of its original violence, has never altogether ceased to occasion inconvenience. Now the reader will easily recognise something of analogy between the occasional causes respectively of the irritable uterus and of the lamed foot. If the painful effects be not of a nature to be identified with a state of inflammation in the one case, it would of course be quite proper to dispute its existence in the other. On the other hand, an over-extension of tissue in the one case might be expected to produce a similar result as to proximate effect to what is known to take place in the other. In the foot case a state of exhausted power was followed successively by an over-extension of fibres and a slow sub-acute inflammation of the injured tissues. Of the fact of the latter result, the author has most abundant reason to be quite certain. But why admit such results in the one case, and deny or totally overlook them in the other? Of the foot case the proper treatment undoubtedly would have been the application of a suitable number of leeches to the part, and the immersion of it for an hour or two afterwards in hot water, or the assiduous application for an equal length of time of hot fomentations to the surface, followed up by a repetition of the same practice on the next, or on an early day, subsequently; giving also to the limb the benefit of two or three weeks' most perfect rest. But it may be very well asked, whether the idea of exclusive irritation could be supposed so directly to lead to the proper practice in such a case, as that of inflammation, or of that even of congestion of the vessels of the part consequent upon the application of the previous injury. The author thinks not. For the same reason, he therefore thinks that the new designation of Dr. Gooch, as applied to the morbid condition of the uterus, which in many respects he has most faithfully described, may have the effect of leading practitioners to an inert and procrastinating practice. About two years ago a case occurred within the cognizance of the author, very well suited to illustrate the tendency of a name to impose upon a weak mind, in an affair precisely of the kind, or rather in the instance of the very disease which we are now describing. Mrs. S. of B. Crescent, a very delicate lady, of about thirty years of age, and the mother of a numerous young family, had been the subject of much uterine irritation for about eight months, for the relief of which nothing very efficient had been done by her ordinary medical attendant. The husband, without giving any intimation to that gentleman of his intention, requested the present reporter of the case to pay his lady a professional visit, and to favour him with his opinion of the nature of her malady, and of its probable issue. The neck of the uterus was found exceedingly painful and considerably swollen; but without structural disorganization. The patient was greatly attenuated, and very pale and spiritless. The case was reported as one of no urgent danger, but nevertheless one involving some ultimate risk, if the present symptoms, which were represented as those of a peculiar variety of inflammation, could not be subdued. On being requested to see the patient again, he suggested the propriety of his being met by the family medical attendant. But that person was unappeasably offended at the husband for requesting another opinion without previously consulting

him and without his consent, and declined all further attendance on the case. In a short time, however, afterwards, upon learning the author's opinion, he took great pains to represent it as being totally unfounded; adding, that if it should be acted upon, the practice would soon prove fatal to the unhappy patient. The neck of the uterus, it has been already stated, was considerably swollen. With the aid of a speculum, it was seen to be also in a state of intense superficial inflammation. All its vaginal portion was of a vividly red colour, similar to that of external genital surfaces when become the seat of a recent gonorrhœal affection. A quantity of viscid mucus was seen distilling from the uterine orifice. Little intimidated by the angry oracular prognostics of his predecessor, the author hesitated not to order four leeches to be forthwith applied to the orifice of the uterus. This duty was performed by the very intelligent midwife of the Maternity Charity, whose useful services in this respect he has already had occasion to notice. He was induced to limit the number of leeches to four, in consequence of observing how intensely the vaginal part of the organ was charged with blood. The quantity of blood obtained amounted to at least ten ounces, and the abstraction of it was almost immediately followed by the happiest results. After an attendance of about three months, during which the application of between four and six leeches were repeated four or five times, the author on retiring had the pleasure of leaving his fair patient in a state of much comparative comfort, of almost total freedom from the distressing pain of the uterus which had recently embittered her existence, and in other respects rapidly recovering her former health and strength. There was in this case very probably the irritability of the uterus, which had been represented by the family attendant as the patient's peculiar malady, but which had been in no degree mitigated by the soothing and strengthening medicines exhibited by him for its relief; but there was also most unquestionably much positive inflammation of the vaginal portion of that organ, the removal of which, by the depleting measures already described, made way for the eventual subduction also of the accompanying irritability. In the case of 'THE IRRITABLE UTERUS,' there is a period of recency and comparative acuteness of symptoms as certainly as there is in those of the irritable tumour of the breast, and of painful affections of knee and ankle-joints from over-extension of their ligaments; and there is little doubt but early and efficient vascular depletion would be quite as beneficial in all cases of the former, as they would probably prove in either of those of the latter. But would the hypothesis of a mere irritableness of the part in any one of these cases directly lead to such a practice? Again, the author thinks not. He accordingly finds local bleeding placed by Dr. Gooch under his second head of remedial measures; whereas the supposition of an over-fulness of the vascular system of the affected organ would naturally point to the relief of such a state AS A FIRST MEASURE. But if the disease be one of irritation and not of inflammation, nor of any condition of the parts allied to that of inflammation, why bleed at all? Because probably the utility of the practice had been fully ascertained by experience before the theory of the irritable uterus had presented itself to the mind of its talented propounder."

From the above observations it is evident that the author considers vascular depletion as forming the main feature of the treatment. But general blood-letting, he thinks, can rarely be necessary. The disease is local, and local abstraction of blood from the os uteri, he avers to be the best remedy. The complaint is usually concealed for a long time, and consequently the cure is rendered thereby tedious. The application of four leeches to the os uteri will generally secure the abstraction of eight or ten ounces of blood, and be succeeded by relief of the symptoms. The second most important measure is the horizontal position—and these two means, if early had recourse to, would soon reduce the disease; but when become chronic, then the recovery is tedious.

"There is however, one point of practice, in reference to this form of the disease, to which the reader will do well to pay particular attention. The subjects of "the irritable uterus" are not always unsusceptible of impregnation. On the event of conception taking place during a period of remission of its most urgent symptoms, the medical attendant should then more than ever, and especially during the earlier months of gestation, insist upon the strictest conformity to his precepts in respect to the observance exclusively of the horizontal position. The action of gestation introduces a great change into the uterine system. During the last four months it places the uterus in a situation to be in a great measure secure from the attacks, if not altogether beyond the reach of some of the most influential occasional causes, of the disease. On the completion of the process of parturition, the patient may indeed be said, in reference to her former complaint, to have the opportunity of commencing a new life. If, during that period, she could be induced to keep her bed, in the most literal sense of that expression, for six weeks or two months, she would almost certainly secure herself against a relapse of her complaint subsequently to her confinement. In consequence of the prodigious development of parts interested in the business of gestation, nature is observed to exhibit a power of self restoration and adjustment during the puerperal state, which at no other time nor under any other circumstances does she seem competent to exert. Hence, in cases of moderate prolapsion of the uterus incurred by forward conduct, during one confinement, a perfect cure may frequently be obtained by the patient confining herself to her bed, and maintaining rigidly the horizontal position for at least five or six weeks subsequently to her next delivery."

Anodynes are necessary, and opium is the most efficient; but as it too often confines the bowels, and checks the biliary secretion, hemlock, hyosciamus, &c. combined with camphor, become necessary as substitutes. Battley's laudanum thrown into the rectum will often succeed, where it is found to disagree if taken into the stomach. As an aperient, Dr. Davis recommends sulph. magnes. in infus. rosar.—castor oil—electuary of senna—sulphur. In some cases of irritable uterus, accompanied by obesity, Dr. D. has seen good effects from mercury, as an alterative.

X. OBSERVATIONS ON THE PRESENT STATE OF PHARMACY IN IRELAND, &c. By DENIS PHELAN, M.R.C.S. of London. Clonmel, 8vo. pp. 160.

Mr. Phelan is an able and assiduous labourer in the field of medical reform, and well deserves the support of those who wish to see our professional institutions purged of what requires removal. The master evil, the prime mischief, the very heart's disease of almost every one of them, is the connexion which subsists between the pursuits of a noble occupation, like that of medicine, and the debasements of mere mercenary traffic. Science and trade can never be married; the very essence of their natures is antipodal; and as well may we expect to see a union between the eagle of the sun, and the crawling tortoise of the fields. It is an ignorant, if not a downright criminal enactment of legislation, which has ordained such an unholy contract, and no honourable man, certainly none who has any regard for the dignity of the profession, would lend support to so unworthy a connexion. Let us hear some of the clauses of the Act of the Irish Apothecaries' Company, and inquire for a moment or two into their proceedings, before we condemn. The first clause states that "There shall be within the City of Dublin, one Company of judicious Apothecaries, well skilled in preparing and compounding of medicines; and there shall be a hall amply supplied with medicines of the purest quality, prepared under the inspection of persons well skilled in the art and mystery of such preparations." The sixteenth clause empowers them "to make and constitute bye-laws and ordinances, for and relating to the affairs and government of the said Company," and the

twenty-second authorizes them to examine all applicants for an Apothecary's licence, "as to his qualification and knowledge."

Mr. Phelan argues, and with much plausibility, that neither these, nor any other of the clauses of the Act, invests the Apothecaries' Company with the power or privilege of instituting a regular curriculum of education, obligatory on all who apply for a certificate; or of instituting courses of lectures of their own, and appointing Professors. Indeed, the very circumstance of the Hall having only within the last five years presumed to exercise such a privilege, is almost proof enough that the right was not clear or indisputable. From the year 1791, when the Act passed, till 1827, no attempt was ever made to step beyond the limits of simply selling drugs, and of examining apprentices and master apothecaries in their knowledge of pharmacy and materia medica; and it appears from their own admission, that their mercantile concern was in a most flourishing condition; for the shares originally £100. each, had risen to six times their value, and some of the worthy members had cleverly contrived to have five or six of these in their own possession, and it is even gravely offered to be proved before Parliament that "a person who never was an apothecary had eight or nine of these money-making shares, whilst many of the most respectable and talented apothecaries in Dublin were in vain endeavouring to get one." In 1827, however, the Hall seems to have wished to announce publicly the marriage of the trade of the druggist with the science of medicine. The preceding thirty-six years had been as it were, the period of courtship, during which the bridegroom had very successfully contrived to make an exceedingly comfortable provision for the establishment of his house; he was now in sooth a thriving man, had vastly increased his traffic, and deemed himself as fit as any one to be a patron of science; especially as it might probably redound to the credit of his purse, as well as of his taste. He therefore ordained an academical course to be followed by the aspirants for the honors of apothecaryship; the extent of this course was attendance on two classes, one on materia medica and pharmaceutic chemistry, and the other on medical botany; even here was the favouritism of trade exhibited.

At no University is there a course of lectures on what is styled pharmaceutic chemistry; the student was therefore obliged to attend two separate courses, one on chemistry, the other on materia medica, unless he selected the short single one on chemical pharmacy delivered by the Professor whom the Hall had recently appointed, but whose ticket was not recognised at any place, for a medical or surgical degree. In 1831 the Directors published other regulations, extending the course of lectures on chemistry, materia medica and pharmacy, and adding thereunto one on anatomy and physiology, and one on the practice of medicine. All this bears the front of an enlightened and well-informed legislation; and so it really was, if not tarnished by some disgraceful jobbing which was carried on at the same time. By the 22d clause it is provided "that no person shall open a shop, or act as an apothecary in Ireland, unless he has served an apprenticeship, and has been examined as to his qualifications and knowledge by the Hall Directors, and that all offenders are to be prosecuted." The interpretation of this must be obvious to a child; and surely it is equally manifest, that if it can be proved that the Company has wilfully compromised and neglected their duty, and permitted ignorant and uneducated men to practise the business of an apothecary, men who had never served an apprenticeship, and who had never been subjected to any examination; and that the Company afterwards admitted these very men to all the privileges and rights of regular apothecaries, upon paying the sum of £20.; they virtually encouraged the very abuses which they were incorporated to prevent; and while they put money into their own pockets, seriously injured the regular apothecaries who had complied with all the provisions of the Act. Naturally enough there was a loud and general clamour of indignant hostility

against such barefaced injustice, and meetings were held in different parts of Ireland to petition Parliament for some changes in the Apothecaries' Act. The Hall Directors' appear to have been aware of the feeble stability of their claims, for they invited a general meeting of the apothecaries in Dublin; but their conduct both before and at this meeting did not indicate any sign of liberality or justice.

Unfortunately, the Dublin apothecaries, (who by-the-bye are alone eligible to the Directorship) did not act in unison with the apothecaries from the other towns and from the country, else, in all probability, the voice of calm unanimity might have gained for them the object of their desires, namely, that of wresting the monopoly from the Directors, and of converting the Hall, from an irresponsible self-elected body of men, to an enlightened and responsible Association.

A committee indeed was formed, and a deputation sent to London to have an interview with the Government on the subject of the usurpation of the Company. The petition was entrusted to the care of Mr. Donovan, under the firm belief that this gentleman was quite favourable to the views and wishes of his constituents; but far otherwise proved to be the case, and Mr. Phelan openly charges him with disingenuous dealing, and truckling to the Directors. The case however is stated to be under the consideration of Government at the present time, and we may perhaps look forward to some speedy change in one, if not in more, of the medical establishments of this country.

Let it not be supposed by any of our readers, from the remarks we have made relative to the powers assumed by the Irish Apothecaries' Company, to extend the courses of required professional education, that we are in any degree friendly to a low standard of qualifications. Far from it: it is not to the propriety of the thing itself, so much as to the right of a particular set of men, incorporated originally, it would seem, rather as merchants than as guardians of an exalted profession, that we object; and even in objecting, we wish it to be remembered, that we are but echoing the sentiments of our author, until we have an opportunity of hearing the arguments of the other side, and of reading their apology. This may perchance prove exculpatory, and may even rebut the averment of the Irish College of Surgeons, that "the Hall had no right or title to institute professorships; that it would be fitter for the apothecaries to be minding their shops, than aspiring to the higher branches of professional knowledge; that it was the unanimous resolve of the College in all ways and on all occasions to oppose such an assumption." Of such an import was the reply, says Mr. Phelan, to a petition of the apothecaries addressed to the College, that the lectures of their professors might be recognised at Stephen's Green.

It is truly distressing to hear of such bickering and quarrels among medical men, but it requires not a prophet to tell us, that until medicine is divorced from drug-selling, and until a high and uniform standard of medical qualifications be admitted, there must continue to subsist the abominable practice of envy, jealousy, and back-biting, which has tended so much to degrade and vilify our profession. The subject might occupy a volume of lamentations, but our limits preclude us from indulging for the present.

XI. DISCHARGE OF WORMS FROM VARIOUS PARTS OF THE BODY.*

John Alexander, aged 10 years, was for nearly a year in a delicate state of health; although his appetite continued pretty good, he had much wasting of flesh and general debility. About eight months since a tumour arose over the epigastrium, which after being poulticed for some days, burst and discharged, with about two ounces of pus, a white worm half an inch long. In a few days the abscess healed. Eight or ten days afterwards a second tumour arose about

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* Extract of a letter from Mr. C. Neilson, of Killala.

three inches distant from the first, on the right side of the chest, which after some days also burst and gave exit to another worm. It is needless to particularize the different instances, suffice it to say, from the time of the first worm being discharged until I first saw him, which was an interval of two months, five worms had made their appearance. They were all similar to the first, and lived for a few hours after their discharge. When I saw him the integuments of the right cheek and eye were excessively swollen, and in the course of a few days another worm was discharged from the upper eyelid. I recommended different medicines for the space of six weeks, but the formation of abscesses on different parts of the trunk and extremities proceeded, and altogether about twenty worms were discharged, principally from the right side. At length two grains of calomel were given every night until the gums became affected, and convalescence shortly afterwards took place, I shall not pretend to say whether from mercurial influence, or from the produce of the original nidus having been exhausted. The boy has been now for nearly three months quite well, his health and strength being completely re-established. The worms appeared to be ascarides. None were, however, at any time observed to be discharged from the intestines, nor were the bowels irregularly affected.

I cannot account for their formation: whether the first deposition of eggs had been made by some means under the external skin, or whether a worm had perforated the intestine, and at length made its way to the surface. I incline to the latter opinion from the boy's previous ill-health. I could in a few instances trace a reddish line from one abscess to the other, this was, however, after the new abscess appeared; the patient himself felt no uneasiness in the part, nor had he any idea where the next abscess would form until it appeared externally.

XII. Observations on the Testicles. By James Russell, F.R.C.S. &c. &c. Edinburgh.

Montesquieu, in his Lettres Persanes, makes the following remarks on compilations and compilers.

"De tous les auteurs, il n'y en a point que je méprise plus que les compilateurs, qui vont de tous cotés chercher des lambeaux des ouvrages des autres, qu'ils plaquent dans les leurs, comme des pieces de gazon dans un parterre: ils ne sont point au dessus de ces ouvriers d'imprimerie qui rangent des caracteres, qui, combinés ensemble, font un livre où ils n'ont fourni que la main."

Voltaire seems to have participated in Montesquieu's horror of compilers, for in his Satires he enumerates as one of the contemptible exploits of the Abbé Trublet, that—

"Il compilait, compilait, compilait."

We suppose that the wrath of these able men was not so much directed against professed compilers, as against those soi-disant original writers, who attempt to palm off old wares and stolen goods, as their own indisputable and legal property. Compilations are undoubtedly useful in their way and in their place, but when they are launched and sail under false colours, they are little better than pirates, and deserve to be fired into as such.

We have every respect for the author of the work before us, and believe him perfectly incapable of pretension to more than is justly his own. In a very modest preface he informs the public that he has preferred giving cases from acknowledged authority, rather than from his own, and the observations are an extension of lectures which he originally delivered when Professor of Clinical Surgery in the University of Edinburgh. But we question Mr. Russell's judgment in giving these observations to the world. If presented with the expectation of profit, we fear he will be disappointed — if of fame, we are afraid that like the spirits of the vasty deep, she will not come when she is called.

We have looked through this little volume, and have found it little more than a compilation. It would require an original and a bold mind, and a vast experience to venture on this subject so soon after the publication of Sir Astley Cooper's work. The sort of style and of matter that suits a dictionary is not adapted to a monograph, and here it is that we think our author has sinned. Had he written the article in a terse manner and more condensed form for a cyclopædia, it would have done sufficiently well, but we fancy that, as it is, the result will be less satisfactory.

As we hate finding fault, we shall leave the ingracious task of criticism, and endeavour to select a few passages for the amusement or instruction of our readers. Speaking of anomalies of the testis, Mr. Russell mentions the following facts.

"Several other anomalous cases are recorded. In one, the scrotum was corrugated, and the testicle elevated upon the blowing of the East wind, which, in general, is a cause of languor and relaxation. In another the testicle ascended into the inguinal canal, whenever the party was in company with women.

But the most curious deviation from the ordinary course of descent, is when the testicle, instead of descending through the inguinal canal, which is its natural course, accompanies the femoral vessels in their progress under Poupart's ligament, making its appearance at the bend of the thigh. Mr. Arnaud gives several instances of this singular variety. The most instructive case is detailed at considerable length. An officer, about forty years of age, consulted Mr. Arnaud respecting a swelling in the bend of the thigh, which was taken for a hernia. Upon an accurate examination of the case, however, Mr. Arnaud satisfied himself that the swelling was not a hernia, but a misplaced testicle. He adduces three reasons in support of his opinion. 1*st*. That the officer had not a testicle in the same side of the scrotum. 2*d*. That the swelling had the form and consistence of a testicle, the appearance of the spermatic chord alone being sufficient to distinguish the case from a case of crural hernia. 3*d*. That pressure produced exactly the same sensation on this as on the other testicle. Mr. Arnaud gave a most judicious advice, that the patient should, now that the testicle had passed out of the abdomen, treat it as he did the other testicle, by doing nothing."

We fancy that the East wind is a cause of languor and relaxation, or just the reverse, according to circumstances. If we look at peoples' noses during an Easterly blast in London, we may venture to conjecture from their blue and pinched condition, what the state of the scrotum may be. Mr. Russell makes a remark in which either his English or his observation must be at fault. "The right testicle," says he, "is said to be more frequently affected with scirrhus, and the left with varicocele. But the truth of this remark requires confirmation." The truth of the first assertion does so, but the second is the expression of a fact so notorious that we feel surprise at any surgeon doubting it.

It is a proverb that there is nothing from which nothing is got. We were not aware, for instance, that young debauchees were called God's geldings, and we do protest, at all hazards, against the propriety of the term; if geldings at all, they are either their own or the devil's. The instinct by which they are detected is curious, indeed, as our American friends say, important, if true. But we will let Mr. Russell tell his own tale.

"Though it is a well-known fact, that young men of fashion, who indulge their amorous propensities to excess at an early age, lose the power of procreating sooner than the more continent, and are familiarly distinguished by the quaint appellation of God's Geldings, I never have been able to discover any exterior marks of discrimination, to distinguish these from other men; but the ladies, who are more discerning in such matters, predicted, in a district of country with which I am acquainted, of six gentlemen in the prime of life, that they never would beget children. The event verified the prediction, as all the six were married, and every marriage proved barren."

Seminal Emissions.

Mr. Russell makes some remarks on involuntary seminal emissions, a very distressing, serious, and often incurable complaint. There is no surgeon in extensive practice in London who does not see very many of these cases. Mr. Russell observes that the complaint may be produced in two ways: by too great continence, or by a high degree of morbid irritability and weakness. The latter is the most frequent and the most important, for the treatment of the former is obvious and usually effectual. In point of fact, the same remedy, sexual intercourse, is applicable to both cases, though the degree to which it is employed must, of course, vary.

"Seminal emissions, in persons enjoying health, are preceded by a full erection of the penis, although no emission takes place till the subsequent stimulus of coition excites the requisite actions in the other organs of generation. But in persons afflicted with morbid irritability, the case is widely different, since in them emissions take place without a full erection of the penis, and without the additional stimulus of coition. The general diminution of power in the generative system, the inseparable concomitant of morbid irritability, occasions both a failure on the full erection of the penis, and a want of retention in the secreting organs, thereby deranging the performance of their functions."

We need not take up our reader's time by dilating on the principle of treating such a case by enjoining sexual intercourse. We have seen one or two instances of complete success, but we have also found that it is extremely difficult to prevail upon some patients to adopt the prescription. We saw a gentleman last summer, who, after struggling for two months to muster sufficient courage, withdrew himself from our care, in consequence, we have no doubt, of a feeling of shame at his want of determination. We have at this moment under our charge another gentleman, who cannot be persuaded to try the experiment.

We have found that this morbid disposition to seminal emissions, conjoined, as it generally is, with more or less deficiency of the vis virilis, is too often owing to the habit of masturbation. The testes not unfrequently waste in these cases, and the patient becomes nearly, if not altogether impotent. But this is not all. We have seen these symptoms attended or succeeded by the most excessive and intractable irritability of the bladder. We say irritability of the bladder, but we merely mean by that expression a certain assemblage of symptoms, without being satisfied of the exact structural or functional alterations on which they depend. The patient has most of the symptoms of stone in the bladder, even, in some instances, bloody urine. Conjoined with these symptoms, there is usually pain in the region of the kidney, and, in some cases, albuminous urine, rendering it more than probable that the kidney is affected. Never having witnessed a dissection of a patient affected in this manner, we cannot pretend to be acquainted with the exact nature of the case. We are sorry to say that we have found no treatment permanently beneficial.

Our author's methodus medendi of the seminal emissions depending on or connected with morbid irritability, appears to be judicious.

"The second variety, as it depends upon weakness and irritability, is much less tractable, and often baffles the most judicious treatment for a great length of time. The indication of cure, so far as diet is concerned, is the direct contrary of the other variety, since abundance of nutritious food, to communicate strength and invigorate the system, is an indispensable requisite of the medicinal treatment. Stimulants of all kinds must be carefully avoided, or used in great moderation under special circumstances when great languor and lassitude prevail. The patient should also be abstemious in liquids. He should not indulge in habits of a relaxing nature. Instead, therefore, of sleeping on a soft feather-bed, he should lie on a firm mattrass, with the air of the room at a moderate temperature, and he should not allot many hours to

sleep. He should pass much of his time in the open air in a cool atmosphere, take frequent and moderate exercise, neither used so long, nor pushed so far, as to occasion fatigue. Cold bathing, too, is a useful auxiliary. Even local cold bathing, frequently repeated, is of advantage; for which purpose, a vessel of cold water may be placed at the bedside, and a wet cloth applied occasionally to the testicles. Great attention should be paid to preserve the general health unimpaired; and, with regard to particular medicines, there are none more serviceable than the different preparations of iron.

Besides the above practices, which relate to the state of the body, it is of great consequence to attend also to the state of the mind. With this view, the patient should banish from his thoughts every lascivious idea, and abstain from reading any book addressed to the imagination on matters of love. And as patients affected with these complaints are apt to despond, and to be troubled with low spirits, every recreation should be encouraged, to prevent them from thinking of their own situation, and, if possible, to keep them amused, or at least to keep their minds occupied with objects which engross the whole of their attention; the patient, at the same time, courting the society of lively and agreeable company. By uninterrupted perseverance in this mode of treatment for a sufficient length of time, the patient may reasonably entertain hopes of obtaining a radical cure."

We think that the great art and great difficulty of treating these cases consists in giving tonics to a certain point and no farther. If we give too much, if we stimulate, the patient becomes feverish, and is rendered worse; if we deplete, he is rendered worse also. Early hours, attention to the state of the bowels and of the digestive organs, relaxation of mind, country air, the shower-bath cautiously begun and judiciously persevered in, with properly regulated sexual connexion, are the means which we have found most beneficial.

Enlargement of the Scrotum.

The English public have been lately rendered familiar with this curious affection by the celebrated and unfortunate case of Loo Choo. The complaint is precisely similar in kind to the Barbadoes leg, and essentially consists of deposition of lymph, but little vascularized, into the cellular membrane. It is occasioned, as in the instance of the Barbadoes leg, by repeated attacks of slight inflammation, each of which leaves a fresh deposition.

Mr. Russell observes that it is endemic and very prevalent among the Bambara nation, on the coast of Guinea, and there it is regarded as a mark of nobility. When the patient goes out to ride, the scrotum is supported on a bowl placed on the pummel of the saddle; and when of the largest size, has a sheet passed over the shoulders, and dragged along the ground, when he attempts to walk. Our readers will recollect, no doubt, Goldsmith's humourous story of the traveller entering a church in Switzerland, where all the congregation had double chins.

Mr. Russell observes that he is aware of only two cases in which the disease originated in Europe. One occurred in the practice of Mr. Liston, of Edinburgh—the other in that of M. Delpech, of Montpellier. Both were related in this Journal. In the West Indies, though long confined to the Island of Barbadoes, it is now extensively diffused among the other islands.

Gonorrhœa and Inflammation of the Testis.

Mr. Russell has made some remarks on this head, that we notice for the purpose of criticism.

"The swelling of the testicles upon the cessation of the discharge, suggested the idea of the affections being vicarious. The transference of disease alternately to the testicles and urethra was also referred to metastasis, or the translation of morbid matter from the one to the other. This doctrine of metastasis, however, is not applicable to those cases in which the discharge from the urethra ceases before the swelling of the testicle appears, since, as there was not any collection of matter to be absorbed from the urethra, none could

be transferred to the testicles. The same argument controverts the doctrine of the inflammation being propagated from the urethra to the testicles along the course of the vasa deferentia. For, if inflammation were extinct in the urethra, it never could be the source of a new attack in the testicles. It is further evident, that when the inflammation of the testicles precedes the affection of the urethra, it must depend upon a very different principle. All we know upon the subject is, that a morbid poison is applied to the penis, and that, after lying dormant for some time, its effects become apparent in the production of various distressing symptoms. And that all the affections of the urethra and testicles are the consequences, more or less direct, of its influence upon the organs of generation. The existence of an intimate relation between the urethra and testicles is proved by a number of cases of daily occurrence, in which the relief of the urethra alternates with the suffering of the testicles, and *vice versâ*. But this alternation, though general, is not universal, and therefore cannot be received as a fundamental law of the system. There are two sets of cases equally incompatible with the doctrine of reciprocity. First, when the inflammation of the testicles does not commence till the discharge has continued for some time, and the discharge, instead of abating, proceeds without interruption in its ordinary course, the affection of the testicles following the same course, whereby a direct sympathy is established. Secondly, when, in the case of a testicle swelling upon the suppression of a discharge, the swelling does not subside upon the restoration of the discharge. Both these cases are alike inconsistent with the truth of the doctrine.

There is, however, sufficient evidence that the urethra and testicles are under the influence of the most delicate sympathy. A chronic obstinate swelling of the testicles often depends upon the presence of a stricture of the urethra, which passed unnoticed, as it neither had excited pain nor produced any difficulty in passing water. The testicle subsides upon the cure of the stricture. But this mode of cure cannot always be employed with effect, as the introduction of a bougie often excites intolerable irritation in the urethra, or affects the testicles, and prevents the continuance of the practice."

Mr. Russell has shewn, satisfactorily enough, that hernia humoralis, is not dependent, as is frequently imagined, on the metastasis of inflammation from the urethra, because it most frequently occurs whilst free discharge is taking place from that canal. But we do not think him so successful in disproving its dependence on extension of inflammation along the mucous membrane lining the vasa deferentia. The reasons which he urges against this supposition are, first, that hernia humoralis occurs when the urethral discharge has ceased; and, secondly, that it may precede the appearance of this discharge. To this we reply, that in the very great majority of cases, inflammation of the testis occurs during the existence of urethral discharge, or immediately after its cessation or diminution—that it very seldom succeeds it at any considerable interval, and still more rarely precedes it. To this we may add the fact, that, in most cases of gonorrhœal hernia humoralis, the parts chiefly affected are the vas deferens and its continuation, the epididymis, parts which, of course, would be chiefly affected by continuity of inflammation. Mr. Russell's theory, that hernia humoralis is a consequence of the application of a morbid poison to the penis, will not bear examination, or at least amounts to nothing more than a vague assertion. A morbid poison can, so far as we know, affect a remote part in three ways only—by continuity of tissue—by metastasis of action or inflammation—or by absorption, and the production of secondary symptoms through the medium of the constitution. The two first are denied by Mr. Russell, and we must presume that he supposes the third process to occur. We need only say that there is no proof of its occurrence, and many weighty reasons for disbelieving it. This is not an idle question, but bears upon the treatment of gonorrhœa. If

stimulating means are adopted to arrest the inflammation of the urethral mucous membrane during its height, and at a time when it is attended with fever, or much local pain; if, in short, large doses of cubebs or capivi be given, or wine drunk, or violent exercise taken under such circumstances, we incur a considerable risk of causing the inflammation to extend along the vas deferens to the testis. On the other hand, it is obvious that, if it be not mere metastasis, it is idle to think of relieving hernia humoralis by means applied to the urethra to increase the discharge.

We have one remark to make upon the idea, that inflammation of the testis not unfrequently depends on stricture, and may be cured by curing the latter. This is pure fancy. It is true that, with chronic inflammation in the urethra, we are likely to have extension of the inflammation along the vas deferens, and thickening of it and the epididymis. But the cure of the stricture, or of the urethral affection, will certainly not cure this, and no good surgeon now-a-days believes that it will.

Neuralgia of the Testis, or Irritable Testis.

This, like facial neuralgia, is an extremely rare and a very intractable malady. Castration has been performed for it sometimes with success, more frequently without it. It were well in this, as in tic douloureux, if we knew with any certainty the causes which render an operation more successful in one case than another, and could apply that knowledge to the diagnosis. Unfortunately it is not so, and we are driven to the enumeration and observation of facts. Mr. Russell has known of only three cases in Edinburgh, and of these two ended favourably. They are highly interesting.

"I was once concerned in a case of this description in the person of a medical practitioner, who came to town from a distance, with the view of submitting to the removal of his testicles. After his arrival, he was put under a course of medicines, which was not of the smallest service; and as his medical friends had no farther measures to recommend, and as his sufferings were intolerable, he finally resolved on the operation. Accordingly it was performed with the most fortunate success, as he was instantly relieved from pain, which never afterwards troubled him. He recovered his health, strength, and spirits, which had been impaired by the severity and continuance of his complaint. A practitioner remarkable for the soundness of his judgment, encouraged by the success of the preceding case, adopted a similar practice in a like case, which, however, was not followed by an equally favourable result, as the patient experienced but imperfect relief in the first instance, while the complaint returned, gradually increasing in severity, till at last it attained its original violence. The next case that occurred here was treated upon other principles. The practitioner, one of the most eminent in town, perhaps influenced in his judgment by the unfortunate issue of the last case, advised the patient to submit to his sufferings with patience, in hopes that time would at last accomplish a cure. The patient followed this advice, and was relieved from his misery in the course of eighteen months."

Each case presenting different circumstances we are unable to draw any conclusion from the results, save that the two patients who recovered were in luck. In a case, but it is not a very severe one, at present under our care, connubial intercourse has been productive of some benefit.

Gout and Rheumatism of the Testis.

Cases of rheumatic testis have been recorded, and when we consider the fibrous structure of the epididymis and tunica albuginea, we need not feel surprised at rheumatic inflammation attacking the organ. Alix relates a case of severe affection of both testicles, which he treated ineffectually as simple inflammation, but hearing that the patient was much exposed to vicissitudes of temperature, he treated it as rheumatic, and with success. Other cases have been related in which swelling and pain of the testes were relieved by

the joints becoming affected, and general rheumatic fever being established, or in which the testicles were vicariously attacked.

"The testicle is likewise liable to be affected by gout very much in the way it is affected by rheumatism. From a characteristic difference, however, between the two diseases, the origin of the attack is often more completely concealed, so that nothing appears to excite suspicion till the supervention of gout in other parts of the body relieves the testicles, and develops the mysterious nature of the case. In some cases of this kind, the attack has commenced with a sudden swelling of the testicle, which was remarkable for its extreme hardness and weight. These symptoms being by some surgeons regarded as pathognomonic of a cancerous scirrhus, have led to the unfortunate practice of removing the testicle by castration. I have seldom in the course of my own experience had occasion to witness an attack of gout in the testicle, but the attacks which I have witnessed were marked with the impenetrable hardness, and increase of weight, so characteristic of the complaint. A gouty affection of the testicle is rather a rare occurrence, so that there is not any appropriate treatment established for the cure.

Obscure as is the nature of the connexion betwen gout or rheumatism and affections of the testicle, the dependence of an affection of the testicles upon that unknown state of the atmosphere which produces an epidemic disease is still more obscure. Mr. Weddows gives a distinct history of an epidemic swelling of the testicles which occurred in the neighbourhood of Wallingford. At least, the number of individuals affected in a short space of time was so great, as to render it reasonable to ascribe the coincidence to the effect of some common cause. The disease was not dangerous, all the patients recovering under the usual method of cure."

Varicocele.

Mr. Russell enumerates the operations that have been resorted to for this troublesome affection—ligature of the vein or veins—division—the application of caustic over the trunk, to procure its obliteration—excision—ligature of the spermatic arteries—and castration. The mere fact of so many operations having been resorted to proves that none are safe and effectual. Mr. Russell has omitted M. Delpech's operation, exposure of the vein and obliteration of it, by the retention of a foreign substance in contact with it. We have another operation to mention, which has been employed two or three times by Mr. Briggs, the senior surgeon of the London Lock Hospital. It is the removal of a large piece of the scrotum. We cannot say how far this has succeeded, but really it appears to us to be founded on a more rational principle than any of the other methods, and to be less liable to dangerous consequences.

We have picked out some portions from the work before us, as either presenting a view or a fact that may be useful. It is rather a rambling production and might have been condensed and methodized with advantage. We fear that Sir Astley has left no room at present for a book upon the testicles.

XIII. Gastritis and Dyspepsia.

Dr. Stokes has been delivering a clinical lecture on these subjects, which we will take the liberty of noticing. The lecture in question is reported in our cotemporary, the London Medical and Surgical Journal, for the 25th of May of the present year.

Dr. Stokes observes that much ignorance prevails on the subject of gastritis and dyspepsia, among British practitioners. We fear that this censure is but too well merited. It appears that the potato diet which some travellers in Ireland are much disposed to laud, is very apt to produce gastritis, which according to Dr. Stokes is extremely prevalent among the Irish peasantry. The case which has chiefly given rise to Dr. Stokes' remarks is the following.

"The patient, who is the subject of the case before us, is somewhat reduced

in flesh and of a sallow complexion. He has complained of pain in the region of the stomach, extending to the back, right hypochondrium, and shoulder. He has had tenderness over the epigastrium, loss of appetite, pain and sense of distension, increased after eating; vomiting of yellow matter occurs two or three hours after taking food, succeeded by thirst. His pulse is soft and slow; tongue clear; bowels open. His illness (and this, I think, is a point worthy of remark) commenced four years ago with pain in the stomach, increased by eating and relieved by vomiting; and some time after this the vomiting began to be succeeded by thirst. The vomiting generally came on in an hour or two after taking his meals, and he threw up a quantity of yellow slime. Another important point is connected with the treatment he has undergone for this disease. He has been relieved by antiphlogistic treatment, locally employed; we treated him since his admission by leeching, blisters, and cupping over the stomach, and latterly he has been using narcotics."

The treatment which has been adopted by the Doctor has been, regulation of the diet—cupping and leeching the epigastrium—and counter-irritation. Dr. S. observes that in similar cases he has employed nearly similar treatment, that in most instances this has been followed by permanent relief, but that, where it has not been so, recourse has been had to narcotics, and particularly the acetate of morphia. Dr. Stokes is convinced of the value of narcotics in these cases. Dr. S. relates another case of chronic gastritis, which is short, and which we extract.

"There is, gentlemen, another case,—that of the patient Denham, who has been complaining of pain and tenderness in the epigastrium, with loss of appetite, and intolerable thirst. His face and extremities are œdematous, urine not albuminous, bowels confined. His tongue is red, and thickly coated with fur; his illness commenced two months since. I looked on this as a case of chronic gastritis; for, you observe, he had all the symptoms, pain, tenderness of the epigastrium, red tongue, impaired appetite, and an insatiable desire of cold drinks. We treated him by leeching and blistering the epigastrium; we gave no purgative by the mouth, but obviated the costiveness by enemata. By this treatment much good has been effected. Since the leeching and blistering his thirst, which was so excessive that I thought at one time he had diabetes, has completely declined; his tongue is much improved, and he no longer complains of any gastric pain. His appetite, however, continues bad; and it will remain to be seen by the progress of the case whether this depends on want of tone in the stomach or actual disease."

The chief reason for which we notice these cases, is, that we may advert to some doctrines laid down by Dr. Stokes on the subject of dyspepsia. He maintains that dyspepsia is a term given to disordered functions of the stomach unattended with organic lesion; or "alteration of circulation." With all deference to the authority of Dr. Stokes, we cannot assent to this position. Dyspepsia is the representative term of a certain assemblage of symptoms, without reference to their cause; it implies a certain alteration of function in the stomach, whatever may be its actual condition. The term dyspepsia in this respect resembles the term dyspnœa, or the term fever. None of them imply any definite organic change, because they may be dependent on many organic changes, or on merely functional disturbance.

It may be said, that if dyspepsia is thus a symptom or assemblage of symptoms dependent on several organic lesions, we should discard the term, and adopt one referable to the special lesion. But, in point of fact, we do this when the lesion is prominent and distinct. If there be loss of appetite, disordered bowels, malaise, depression of spirits, uneasiness in the stomach after taking meals, and slight tenderness at the epigastrium, we name this dyspepsia, not because there is no organic change, not because there is not slight inflammation of the gastric mucous membrane, not because it is purely the nervous system of the stomach that is at fault, but be-

cause the actual lesion is not certain, and it is, therefore, more convenient to erect the assemblage of symptoms into a disease. If those symptoms increased in severity, if vomiting supervened, with more distinct fever and more decided pain and inconvenience in the region of the stomach, we should then discard the unphilosophical term of indigestion, and adopt that of the evident lesion—gastritis. It is true that it is somewhat unphilosophical to erect an assemblage of symptoms into an entity, and term it one disease; but it would be still more unphilosophical to assign to those symptoms one definite cause, when facts do not confirm it. It is the lesser evil that we choose—it is in some degree an acknowledgment of ignorance; and, in proportion as our certain knowledge advances, will such exhibitions of imperfect science disappear.

We indulge in these remarks, because we are astonished that a man of such information and such talent as Dr. Stokes should have fallen into an error so vulgar and so palpable, and because it is a practical question. If we believe, and especially if we do so independently of strict induction, that dyspepsia depends on one cause, and still more if we believe, with Dr. Stokes, that that cause is affection of the nervous system, what can we do but adopt an empiric mode of treatment? But, on the other hand, if we look on the malady as one of function, dependent on several conditions of the organic apparatus, we are necessarily forced to investigate the particular case, to see on what the dyspepsia depends in the individual. In one, we find comparatively little epigastric tenderness, the circulating system is below par, there appears to be no local vascular action, and such a person bears tonics and generous diet —in another, there is an epigastric tenderness, and a foul or red tongue, and an irritable stomach; he is benefited by very mild aperients, with sedatives, counter-irritation to the epigastrium, the mildest farinaceous food, and the careful abstinence from stimulants or tonics, until all tenderness and all vascular irritation is removed: in short, we might enumerate several shades of difference, and the judicious practitioner is he who is aware of the fact, and shapes his treatment accordingly.

It was, strange to say, an ignorance of this fact, and a consequent bad system of treatment, that gave Mr. Abernethy his reputation in the management of dyspepsia. He wrote at a time when men were merely breaking ground in true pathology—when systems had still their hold, and names their charms. He assumed, but he assumed boldly; and, with much sterling merit and some meretricious influence to support him, he persuaded the world that purging, that blue-pill and black-draught would agree with their stomachs. We wish those stomachs joy of their contents.

Dr. Stokes makes several judicious reflections on chronic gastritis; among others, that it is impossible to lay down, or, indeed, in practice to discover, the difference between chronic gastritis and dyspepsia. This is not to be wondered at, since, in many instances, chronic gastritis is the essential cause of dyspepsia. The following remark is founded on the misapprehension of the real value and import of the term to which we have already alluded. "I feel convinced (says he) that chronic gastritis is very often confounded with dyspepsia by British practitioners. It is treated as disease of the liver, by blue-pill and black-draught; it is treated as dyspepsia, by tonics and stimulants; it is treated as constipation, by drastic purgatives." That chronic gastritis is frequently overlooked by practioners is, we fear, too true, and we fear that their treatment of dyspepsia is not always so judicious as might be wished. The purgation system has taken too deep root to be readily destroyed. But we protest against the inference that may be fairly drawn from the sentence which we have quoted—that dyspepsia is, as a matter of course, to be treated by tonics and stimulants.

Dr. Stokes mentions one or two other facts, of so interesting a character, that we cannot close this short article without extracting them.

"There is another case which I wish to notice: it has been, I believe, one

of an acute character; I allude to that of the man in the Fever Ward. This person, after committing an excess in drinking, got sickness of stomach and vomiting. In your investigations of any case which comes before you, it is of importance, towards forming a correct diagnosis, to hold these two things in view,—the exciting cause, and the first symptom of disease. Here you have, in the first place, excitement of the stomach from the use of spirits, and afterwards irritation, manifested by the vomiting. This was followed by loss of appetite, constipation, pain in the lower part of the left hypochondrium, foul tongue, red at the tip, symptoms which indicate irritation of the mucous membrane of the stomach and intestines. When he was admitted into the hospital, however, what he chiefly complained of, and what were certainly the most prominent symptoms, were tightness across the chest, great difficulty of breathing, and harassing cough. His cough was indeed very severe, his sputa slightly tinged with blood, his breathing very much accelerated, and, to a superficial observer, he would appear to labour under chest-disease. But, remark, we found out that he had been complaining of these symptoms for about three weeks, and consequently, if they had been pulmonary symptoms, they must have proceeded to a very alarming extent in that time. Mr. Lees examined him by percussion and with the stethoscope, but could not detect any disease of the lungs, and he was examined by myself on the next day with the same result. Moreover, the patient had been previously treated for pulmonary disease without success. We were, therefore, led to conclude that there was no original disease of the lung, but only sympathetic irritation, depending on gastritis. We took small quantities of blood from his arm, leeched the epigastrium, kept his bowels open by enemata, and under this treatment we saw all his symptoms disappear, as it were, by magic."

Dr. Stokes mentions two other cases. A man was in the hospital, labouring under "what might be called a tussis firma." He was treated with leeches to the epigastrium and iced water, with most signal benefit. He committed some excess in eating, and had a return of his complaint; he was treated again in the same way, and recovered. Dr. Stokes attended a lady some years ago, who complained of some feverishness, with very severe and harassing cough. He treated it as a case of fever, with irritation of the bronchi. The fever declined, but the cough continued, and Dr. S. was embarrassed. The lady remarked one day that she had been under Dr. Cheyne's care for a similar complaint, and had derived much benefit from leeches to the epigastrium. On this hint Dr. S. acted; the leeches were applied immediately, and the patient's cough entirely disappeared.

These cases are certainly in favour of the belief in "a stomach-cough." But we fear the sin is on this side, and that real pulmonic disease is too often ascribed by practitioners to dyspepsia, or affection of the liver. The Editor of this Journal has seen several melancholy instances of the injurious consequences of this popular error. The opposite mistake is, at all events, the safer.

Before we conclude, we will make one remark. It gives us the highest pleasure to see such eminent physicians and surgeons of Dublin as Dr. Stokes, Dr. Graves, Mr. Crampton, and others, publishing essays and clinical observations in the journals. These gentlemen appreciate rightly the times and the public mind, and it is most gratifying to us to perceive, that they have not only the power, but the inclination, to diffuse information and advance the profession. We bid them persevere in the good cause.

XIV. MR. ROBERTSON ON DRY CUPPING.*

Mr. Robertson, an intelligent surgeon residing in High Holborn, has published some interesting cases of pain de-

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* Lancet, Jan. 19th, 1833.

pending on various causes relieved by dry cupping. The cases in which he would recommend it are those in which the pain is dull though severe, deep-seated, chronic, not much increased by pressure, or has refused to yield to ordinary means. The way in which he generally employs the remedy is to throw a very minute bit of paper touched with ether or turpentine, lighted, into a large glass or tumbler, and press it down in the usual way. This is a very effectual and a very convenient method of obtaining the requisite exhaustion, and is attainable when the regular cupping apparatus is not. We will select two cases out of eight related by Mr. Robertson. They are the most interesting and perhaps the most satisfactory.

Case 1. *Spasmodic Pain in the Loins, post Coitum.*

"A stout young gentlemen, and in fine health, was seized shortly after connexion, with most violent deep-seated pain in the region of the *left* kidney; so severe that he was unable to walk, stand, or sit. Lying on his back on bed, or on a sofa, gave a little, and only a little, relief, and frequently did not relieve him at all. He had been often attacked similarly before, and traced it distinctly to connexion. The peculiar sensation in the part commenced immediately after coitus, and could be felt distinctly increasing more and more till it ended in a paroxysm. Sometimes the sensation went off altogether, particularly if he carefully kept the recumbent position; but when it did not, four or five hours would intervene before the paroxysm came to its height. In one instance he was attacked severely while walking home, and had very nearly fallen down in the street. In another he was awoke in the night. Twenty or thirty leeches relieved it the first time. In about two months it came on again, when bleeding at the arm, and 70 leeches over the seat of pain, gave him only moderate ease.

After some months' interval it returned a third time, and leeching, even to a very great extent, seemed to have altogether lost its power. A blister and some internal medicines were prescribed by a physician with little relief, when I ordered 20 leeches to the anus; this, and the recumbent position for two days, subdued it.

A fourth time he felt it coming on. This was at midnight (connexion having taken place some four hours previously), and when I saw him, the pain in the left lumbar region seemed frightful, deep-seated, and of that peculiar nature, that he could bear almost any pressure on the part without shrinking. He lay in bed writhing like a serpent.

I felt loath to bleed him to such an extent as had been requisite formerly to subdue it. Leeches were not at this time conveniently to be had, and I determined to try the effect of dry cupping. A very large tumbler was put over the part, kept on for a minute or two, till it seemed to gall him; taken off, and replaced three or four times. The effect delighted and almost astonished me. One minute after it went on, the most perfect relief was felt; the pain was entirely gone; so afraid was he of its return, and so keen to have the glass on, that he insisted upon having it on and on, till the edges of the tumbler had almost cut into the muscles! This he declared he cared not for. It was a trivial thing compared with the dreadful and insufferable pain in his side. I knew him for years afterwards, and though the cause was continued as before, he never had any return."

Mr. Robertson supposes, reasonably enough, that the pain in this instance depended on spasm of one of the lumbar muscles.

Case 2. *Pain in the Left Umbilical Region.*

"A very interesting young lady, the wife of a friend of my own, left ——for Edinburgh, immediately after the marriage ceremony was performed; and when about half-way, was seized, while in the carriage, with most violent pain in the left umbilical region. Her husband managed to get her by easy journies to Edinburgh, where she remained about three weeks, and was bled, blis-

tered, purged, and put through all the ramifications of the strictest antiphlogistic system.

At length she was obliged to be brought home by short stages, a distance of 40 or 50 miles; and was ultimately relieved by turpentine enemata, which brought away some discoloured hardened feces. Her menstrual periods had for years been attended with extreme pain. During the two years which followed marriage, she was said to have had two miscarriages. During the third she miscarried again, and was getting round, when I was suddenly sent for, on account of an alarming pain *in the very spot which had formerly been so productive of suffering*. She could not account for it; she had been lying quietly in bed, and had been eating and drinking nothing to produce it. The lochial discharge went on as usual, and her bowels were natural, as she had, ever since her former attack, used Maw's instrument. Leeching was proposed, but to this I objected, on account of the loss of blood she had sustained so lately, and from the effects of which she had not as yet recovered.

I determined first to try dry cupping; she assented, and as the things are always at hand, in five minutes she was so well as to be able to joke with her husband and me about 'the very troublesome wife' the former had. It never returned.'

XV. THE MEDICAL BOARDS.

Our Medical Boards are, we fear, in a bad way. The filthy fingers of reform that have polluted so many establishments remarkable for their antiquity, and consecrated by memorials of the wisdom of our ancestors, have begun to touch the outworks of our own popular institutions. Those whose duty and whose interest it is to cling to those institutions to the last, have but too much reason to consider this the prelude of a general attack on the strong holds themselves. The work of spoliation which is busy with all that is dear to them, which is now seen encroaching on the hallowed prerogatives of law, and now on the sacred establishments of church, is too likely to be enacted on the sister frame-work of physic.

The present may indeed be considered as the age of bold bad men. Those who have long been connected with our medical institutions, who have thrived and lived by them, and are consequently best acquainted with them, who unite with a keen perception of their beauties a necessary knowledge of their defects: these gentlemen, we say, aware of the difficulty of amendment, of the weakness of human reason, and the fallacy of theory, have declined to enter on the hazardous experiment of reform, have been prudently satisfied to let well alone, and have justly considered that at present there is a certain benefit to a few, whilst popular alterations would disperse and subdivide it among the many, so that it would not afford substantial livelihood to any. If reform come, they wash their hands of it, and when the mass of the profession, the ignavum pecus, have completed the work of destruction, have levelled the gilded roof and the ornamented column, they at least will have been guiltless of the Vandalism.

The deplorable state of feeling which exists at present, is depicted in characters too legible, in the destruction of the National Vaccine Institution. It is true that many ignorant and more evil-minded individuals had looked upon this as a job, and it is true also that the Government had unhappily been deluded into a similar belief. It is the prevalence of such a disposition in governors and governed, that is calculated to excite a feeling of dismay in all who wish well to medical science. The following, and unhappily the last report from the National Vaccine Institution, is a sufficient answer to its calumniators. It is at all events a splendid thing in the annals of the institution that it has died in the arms of glory; happy if, like Decius, its destruction might appease the infernal gods, and avert their wrath from the remaining pillars of the state.

"TO THE RIGHT HON. LORD VISCOUNT MELBOURNE,
Principal Secretary of State for the Home Department.

National Vaccine Establishment, Russel-place, 21st Jan. 1833.

My Lord,—The Board of the National Vaccine Establishment has executed the benevolent purposes of Parliament this last year with its usual zeal, and with all possible success.

The number of Persons vaccinated in the metropolis and suburbs by its own immediate agents, within the last twelve months, has exceeded that of any former year by 3000, and the means of giving the protective process have been distributed by us to more than 100,000 others in various parts of the world. To maintain such a supply of the vaccine lymph, and to be prepared to answer on the instant the incessant demands which are made upon us for it, nothing less than a National Establishment is adequate; and accordingly we have found that where the charity of individuals, however abundant and well organized, has been appropriated to institutions having the same objects in view in the country, such institutions have always failed.

The opportunity of taking the lymph from a vesicle in progress, in order to be most successful, should be taken between the seventh, and eighth days, which is so limited a period, that, unless there be a large number of vaccinators to contribute continually their respective quotas of authentic lymph into a common depôt, there is danger of the store failing when it is most urgently wanted.

The small-pox has been prevailing with its usual fatal results in various parts of the country since our last report; and magistrates frequently write to us to express their regret that they cannot prevent ignorant persons from going about the country to inoculate; but we still live in hopes that the good sense of the people will discover the superior advantages of vaccination, when it is repeatedly stated to them as a fact, that, of an equal number of persons vaccinated and inoculated, only so many of the former will be capable of taking the small-pox afterwards, and that in a safe degree of the disease, as are found to die by the latter.

(Signed) Henry Halford,
President of the Royal College of Physicians.
Thomas Hume, M.D.
Censor.
John Painter Vincent,
President of the Royal College of Surgeons.
Clement Hue, M.D.
Registrar."

Our contemporary, the London Medical and Surgical Journal, which appears to rejoice at the abolition of the Board, mentions a few circumstances connected with other boards. It observes that, among the expenses of the colleges of Scotland, a return of which has just been made to Parliament, two items of a curious description are to be found—a salary to His Majesty's limner, and one to His Majesty's historiographer. We have no doubt that these gentlemen render important services to medicine—if they could be known. There are two other items, which probably can be equally satisfactorily explained.

To His Majesty's Plate at the Races.. £100
To the Caledonian Club 100

It might seem absurd to a superficial examiner, that horse-racing and medical appointments should be united. But when rightly viewed, there is considerable analogy and connexion between them. One is a race of the bodily, the other of the intellectual being. There is equal discipline beforehand, currying, combing, trotting, and gingering—equal hard work in the race—and, in both cases, a good stall and good provender afterwards.

XVI. The Factories' Regulation Bill.

We are forcibly struck with the unpretending and philosophical manner in which our contemporary, the Phrenological Journal advocates the extension of education and the moral advancement of the community. There

are some observations on the proposed restriction of the labours of factory children to ten hours daily, which do credit to the judgment and the feelings of the writer. At the present period, when a commission, partly consisting of medical men, is visiting the manufactories, it may not be amiss to offer a few remarks upon the subject. It is one in which medical observation must and should form the basis of legislative enactments, for were not the health and existence of the children at stake, there could be no valid reason why Government should interfere between capital and labour. There are some, we believe, among others, Mr. Hume, who conceive that the Government should not interfere even in such a question as this. We must confess that we differ from these gentlemen, and we think they are yielding overmuch to system and to abstract principles, when, for their sake, for the sake, in short, of free competition and free trade, they sacrifice the health, the comfort, and the lives of millions, and those the most defenceless. Mr. Cobbett observed, and very rightly, that the parties at fault were not the manufacturers. The children are not slaves; they are not compelled by the masters to enter into the factories. No; it is the distress or the avarice of the parent that sends his child to the mill, and Parliament does in reality protect the offspring from the cruelty, perhaps in general unavoidable, of the father and the mother.

Our contemporary justly observes that the question, stripped of all factitious considerations, is simply this:—Can children support twelve hours in the twenty-four of labour? We answer unhesitatingly that they cannot; and were the members of the medical profession, from John o'Groat's house to the Land's End, polled on this particular point, we know that, almost to a man, they would make this answer. There need neither commissions nor commissioners to tell us this—our common sense and common observation are sufficient to decide the matter. The children of the middle and opulent classes in great towns, who have no such appalling amount of toil, who do not breathe the heated atmosphere of the mill, who are well clothed and well fed, and comparatively well exercised, are found on the whole to pine, and to require the pure air of the country or the bracing atmosphere of the coast. And we are told that the child of the Manchester mechanic, labouring for twelve hours in a manufactory, heated to 70 or 90 degrees, with an atmosphere smelling of oil, or turbid with the fine dust engendered in the processes—obtaining only a hurried or a scanty meal—ill clad, and passing from such an atmosphere to the open air, and probably to a wretched tenement—fatigued at a monotonous employment, amidst the continual whizzing of machinery—its spirit cowed with the dread of punishment from the hands of the overlooker, or dismissal, and still worse treatment at home—we are told that children can bear all this, and that they are not *very* badly off. Let those who choose be satisfied with the excuse; but sure we are, that our profession, best acquainted, as it must be, with what human nature can and cannot bear, will repudiate it without a moment's hesitation.

Were a Malthusian to argue in support of twelve hours of labour, we might acknowledge his consistency, however we disapproved of his inhumanity. But the Malthusians are silent, and whatever they may think, they have not ventured to defend the present abominable system. If, indeed, their doctrine be correct, and if the better feelings of the age continue to diminish the unwholesomeness of the employments of large bodies of the community, we do an ultimate evil at the expense of both manufacturers and children.

Dropping, however, these considerations, the question has formally and solemnly been put to us, the medical profession, and it has been put to us by the public as well as by the Parliament, do we or do we not think twelve hours of labour consistent with the health, a merely tolerable degree of health, of factory children. The profession, so far as it has had an opportunity of speaking out, has replied that

it cannot be. We trust that the medical men on the commission, able and upright as we know that they are, will not allow themselves to be seduced by persuasion, by the indifferent tone of the society of masters into which they must be thrown, or by any considerations of what may be palatable to parties or to individuals, but will do their duty fearlessly, and respond to the general sentiment of the profession. The eyes of that profession are on them, and we do not doubt that they will prove themselves its representatives.

We have lost sight of our contemporary, to whom we referred at the commencement of these remarks. He observes that whether we look at the effects of the present amount of factory-labour on the muscles and bones—the brain and nervous system—the digestive organs—or the organs of respiration, we shall find them alike condemnatory.

It is proved by evidence that deformity prevails among the children, that their growth is retarded on an average nearly two years, that few if any attain the usual degree of robust development or vigour, and that many become thin, feeble, and wretched from the day they enter the mill. The witnesses are unanimous in their complaints of the dulness, heaviness, and sleepiness of the children, in the impossibility of keeping them awake at school, or exciting them to further labour, after their labour is done, whilst in many mills corporal punishment is or was regularly resorted to in the latter part of the day, to produce wakefulness, and at this time, too, the accidents from entanglement in machinery usually happen.—The children are subject to convulsions, typhus and other diseases of exhaustion.

Want of appetite, bad digestion, and sallow unhealthiness of aspect are prevalent among the children. In many of the factories no pause is allowed for meals, and the unhappy wretches are obliged to eat in mouthfuls, as they can best snatch a moment for the purpose, while their food, from the lowness of the wages, is at best insufficient to maintain them in vigour, and is often spoiled by the floating dust. Few too escape pulmonary disease either in early, or, if happily they attain it, in advanced life.

The temperature of the factories in many stages of the operations, requires to be kept as high as from 70° to 90°, the average of tropical climates.* Some of the masters have invited an inspection of their mills, and of the children working in them, But our contemporary justly observes that this is the best part of the case. We see at the mills only those who *can* work, we do not see those who are disabled or diseased and *cannot*. Inspect the mills, but inspect also the houses of those who are and who have been in the factories—do justice to the master, but do justice also to the child—in fact, view the whole, and not merely the most or the least favorable part.

We need scarcely say that there are moral and political considerations, as well as medical, at stake. Our immense manufacturing population is becoming physically degenerate and degraded, the decrepid and deformed begetting their like. They are growing also more vicious and more turbulent, and all agree in the existence of a spirit in the manufacturing districts which cannot be regarded without the deepest alarm. Lord Brougham has stated the state of education in this class is deplorable almost beyond relief. And where is the wonder of all this? Underfed, overworked, without a prospect of bettering his condition, or passing from what is after all worse than slavery, the artisan has no tie to bind him to his country or her institutions, and in every master he sees a sordid and unfeeling tyrant, in every man better off than himself a spoliator or a speculator in his sweat and toil. Government is in his eyes a combination against him, and the whole nation resolves itself into two great classes, the oppressors and the oppressed.

XVII. The Heliotrope; or Pilgrim in Pursuit of Health. 8vo. 1833.

Whether the Pilgrim be a physician or

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* This, by recent confessions, is an exaggeration.—Ed.

patient, certain it is that he is a poet—and one of some promise. The poem itself will be interesting not only to those who seek health from Italian skies, but to those who delight in historical recollections, and beautiful description of celebrated scenes. The author writes a good deal in the style of Byron, and gives a very animated delineation, not only of the voyage to Italy, but of his journies in search of health subsequently. We greatly fear that the youthful poet has over-rated the salubrity as well as the pleasure to be derived from the climate of fair Italy. The following stanza on the bay of Naples will exemplify this remark, and at the same time, convey some idea of the style of the author.

——— Here if thou lovest a clime
Where health may flourish—rankling care decrease
And beauteous Nature smooth thy stream of time—
Here, in Campania's *Aprosapolis*—
Repose! and feast thy soul with scene sublime—
* * * * *
The sunbeam shall not smite thee, for the sea
Tempers its fervour; Winter's kindly ray
Shall never chill thee, for the myrtle-tree,
Pomegranate, palm, and citron, shade the bay
With fruit and foliage; Nature's face shall be
Thy book and mirror—one long Summer day
Thy life; and when at last thou takest thy rest,
Unfading Spring shall fold thee in her breast.

If the physician could corroborate this description of the poet, then indeed would Italy be a paradise as well as a *portus salutis!* But it unfortunately happens that the ratio of mortality, even in this delightful Parthenope, is full double that of our own foggy, stormy, and rainy isle!

XVIII. MARCH OF INTELLECT.

Within the last few weeks medical science has made some most rapid strides. In Paris a female underwent a formidable surgical operation while in a state of somnambulism, produced by animal magnetism. M. Chapelain operated on the senses—M. Cloquet with the knife. The somnambulic sleep, or insensibility, lasted 48 hours, and on awaking, she experienced some emotion at the sight of her children, and on learning that the operation had been performed. The magnetiser checked this emotion by immediately throwing her into a sleep again. We hope that the æra of suffering under the knife is over. No doubt that death itself will soon be divested of his sting!

At home, a most important discovery has been made—the attraction, or rather the extraction of tic douloureux by the north pole of the common magnet. A man in St. Thomas's Hospital had long suffered from neuralgia of the finger, and all the remedial agents—including iron, colchicum, and the lobelia inflata, had failed. The instrument is of the horse-shoe form, ten inches in its longest axis, and five in shortest. It is composed of five layers of metal—the central being the longest, and the whole bound with strong rib-band. The North pole of the magnet was gently passed five or six times down the sides and back of the affected finger, and then rested on the central joint. The result was such a cessation of pain that the man could "knash his fingers into the palm of the hand with ease and comfort." Dr. Blundell, the operator, shewed that the power of the instrument did not cease here. He reproduced the pain in a most intense degree by applying the South pole of the magnet. After permitting the tic to continue for a short time the North pole was re-applied, and the pain again removed. A similar operation was equally successful in two other cases!

These are extraordinary facts; but those who have witnessed the capricious assaults and retreats of that merciless tormentor, tic douloureux, will have some doubt as to the future success of the magnet, when the novelty of the remedy has passed over. Still, as there is no juggle in the business, as is evidently the case with "animal magnetism," we recommend a full trial of the operation.*

A proposal has been made by Mr Lucas, of Weston Street, to dissolve the calculus in the bladder, by means of "solvents introduced into a sac in

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* Since the above was written, we learn that the operator gives each patient half-a-crown! So, then, there is a silver magnet to assist in extracting the TIC.

which it (the calculus) has been isolated." As Mr. Lucas has not given us any description of the instrument, though he affirms that it is perfectly free from danger, and applicable to all cases, we must wait for a further development of the plan.

XIX. LABOUR OR ENNUI. WHICH IS THE GREATER EVIL?

The whole nation, from Shakespeare's cliffs to John o'Groat's, is labouring under a severe attack of *acute* humanity—and the medical profession has caught the contagion;—the moral influenza being decidedly infectious. Sir David Barry, lucky chap! has been packed off to the Highlands, for change of scene from St. Petersburgh, and is now (or has been lately) dancing strathspeys in Perthshire with his brother commissioners. We shall soon have a volume of reports on the nature of the new epidemic, its prevention, and cure.

It has been discovered that a portion—a very small one indeed—of society is oppressed with too much labour, and the sympathies of the whole population are called forth on this interesting occasion. There is an evil, however, in existence, infinitely greater in itself, and far more injurious to society, which seems to have escaped the notice of our brethren in particular, as well as of the public at large, viz. the WANT OF LABOUR. The miseries which spring from this source are incalculable! IDLENESS, both voluntary and involuntary, is the parent of crime and the inexhaustible fountain of discontent. God forbid that we should advocate cruelty, drudgery, or slavery, at home or abroad; but we cannot help thinking that the outbreak of outrageous sympathy for a few thousand boys and girls, who are no doubt overworked, is quite disproportioned to the cause. Let the philosopher and philanthropist look around, and contemplate the prodigious mass of misery and crime produced by the want of employment—and let them devise schemes for alleviating the evil. Every political economist, from Malthus to Martineau, acknowledges the unhappy consequences of a redundant population—an evil constantly and rapidly increasing! Plagues, pestilences, famine, sickness and premature deaths, are the means by which nature and art are endeavouring to lessen the magnitude and growth of the evil. The "FACTORY LABOUR" may be, and probably is, one of the means inseparable from a high state of civilization and mechanical improvements, which abridge the duration of life and check redundant population. It may be abolished; but the same consequences will spring up under some other head. The swarms engendered in our manufacturing towns will die prematurely, whether by excess of labour or defect of food; and the problem has yet to be solved, which is the lesser evil. We have visited many of these factories, and unless our observations are inaccurate or our perceptions obtuse, we have come to the conclusion, that the destructive influence of excessive work is monstrously exaggerated. In several localities—we shall only particularize Lanark—the operatives appeared remarkably healthy—and, in most of the others, we very much doubt whether the mere amount of labour conduces so materially to the abridgment of existence as is represented. Where can we turn our eyes without seeing the destructive operation of causes connected with the actual state of society? Are our nobility exempt from them? No, indeed! the ennui of civilized life, *the want of work*, sends five hundred to a premature grave, for every unit of mortality produced by "*factory labour*," or by excess of muscular exertion any where. Go, for instance, into that splendid REFECTORY (Verry's) in Regent-street, and look at that beautiful piece of wax-work on your left, who sits smiling on the whiskered ice-eaters in the saloon. Her flesh is like double-refined spermaceti—and her blood like water, with a slight dash of port-wine. Her span of existence will be very short. And so of ten thousand other maidens in this metropolis, whose sedentary avocations push them prematurely into the silent tomb! Why not introduce a bill for the amelioration of this immense class? Is it not an abominable shame, that so many fine young men should perish by the sword,

by disease, and by "over-exertion" during war? Should there not be an act of parliament to prevent shipwreck and scurvy among our valiant tars? Why are men allowed to go to the East and West Indies to die of hepatitis, dysentery, and yellow fever, long before they have attained the honorable age of three score years and ten? Why are coal-heavers allowed to drink so much "*heavy wet*," ending in dropsy? Why are chimney-sweepers *forced* to live upon soot, and die of cancer of the scrotum? Is it not inhuman to permit so many thousand men to labour in the bowels of the earth, deprived of light and air, save when the fatal choak-damp explodes around them? Are not our delicate female children *forced to labour* at music, drawing, and Italian, to the great detriment of their health, when they ought to be out running among the fields and hills? Finally, (and this is an argumentum ad hominem,) is it not grievous to think that a large class of medical men themselves are often *forced* to continue at their *labours*, not for ten or fourteen hours merely, but frequently for 24 or 36 hours, without intermission! Why does not the faculty, and especially the large obstetric class, apply to the Legislature for an act that may limit all *labours*, whether natural, complex, or difficult, to ten hours' duration?

To conclude, we do not object to the regulation of labour in factories; but we would take a wide and comprehensive view of things, and sweep away all other grievances, many of which are infinitely more productive of sickness, death, and misery, than the fourteen hours work in cotton mills.

XX. DR. CARSWELL ON CARCINOMA.

IN the Review Department, page 144, we alluded to Dr. Carswell's second fasciculus of Illustrations of the Elementary Forms of Disease, but we had not space to notice at large the opinions and statements of the able author. We shall do so here.

The subject of the present fasciculus is carcinoma, which Dr. Carswell considers under the general head of heterologous formations. Their essential character depends on the presence of a solid or fluid substance different from any of the solids or fluids which enter into the healthy composition of the body. But this substance presents such varieties as to constitute diseases of different kinds, which have been named scirrhus, fungus hæmatodes, calculus, &c. Dr. Carswell includes under the following denominations what he conceives to be distinct diseases belonging to the class of heterologous formations, viz. carcinoma, melanoma, pyonoma, tyroma, lithoma.

Carcinoma, then, is a genus in which Dr. C. comprehends as species, scirrhus; common vascular or organized sarcoma; pancreatic, mammary, and medullary sarcoma; and fungus hæmatodes.

"The following reasons may be assigned for thus grouping together under the generic term of Carcinoma, so many diseases generally described as differing widely from that which is commonly known by this designation. 1st. They often present, in the early periods of their formation, certain characters common to all of them, however much they may differ from each other in the subsequent periods. 2d. They all terminate in the gradual destruction or transformation of the tissues which they affect. 3d. They have all a tendency to affect several organs in the same individual. 4th. They all possess, although in various degrees, the same reproductive character."

We have often expressed our opinion of nosological classifications. If the subjects are such as to admit of a simple and natural arrangement, so much the better. But if the arrangement is at all forced, the object of a classification, facility, is lost, and nature is sacrificed to an insane love of system. We doubt whether we are justified, in the present state of our knowledge, in accepting Dr. Carswell's classification. The structure of the vascular sarcoma, or of the mammary sarcoma and of scirrhus are very similar in certain stages, but the diseases, on the whole, are exceedingly dissimilar in progress

and in virulency, and we say again that we doubt the propriety of uniting both under the common appellation of cancer.

Dr. Carswell admits that there are differences of considerable importance between these diseases, but that they are referable to two states of the heterologous deposit. The first is that in which this deposit has little or no tendency to become organized; the second exhibiting a greater or less disposition to become so. He, therefore, divides carcinoma into two species, the first of which he terms scirrhoma, the second cephaloma, the heterologous deposit presenting itself in them under various forms, which may be regarded as constituting so many varieties of each species.

"*Varieties of Scirrhoma.*—The varieties of scirrhoma are determined chiefly by the relative quantity of the Heterologous Deposit, the manner in which it is distributed, and the difference of colour and consistence which it presents. Thus, it may be collected in numerous points in the form of a hard, grey, semi-transparent substance, intersected by a dull white or pale straw-coloured fibrous, or condensed cellular tissue, and, as such, is commonly denominated *Scirrhus*. When it assumes a regular lobulated arrangement, so as to represent an appearance similar to a section of the pancreas, it forms what was called by Mr. Abernethy the *Pancreatic Sarcoma*. Again, it may be disseminated uniformly throughout the texture of an organ, which it converts into a solid substance resembling a slice of raw or boiled pork, and is then called by the French the *Tissu Lardacé*. Lastly, when it presents the appearance of firm jelly, and is collected into masses of greater or less bulk in a multitude of cells, it is the *Matière Colloïd* of Laennec, the *Cancer Gélatiniforme* or *Aréolaire* of M. Cruveilhier.

Varieties of Cephaloma.—The principal varieties of cephaloma are derived from the appearances which the Heterologous Deposit presents either in different organs or at different stages of its development. When it presents the appearance of firm coagulable lymph, or fibrine deprived of the red colouring matter of the blood, possessing a uniform, fibriform, or lobuliform arrangement, with a certain degree of transparency and vascularity, Mr. Abernethy gave to it the name of *Common Vascular* or *Organized Sarcoma*. In this state the Heterologous Deposit is generally collected into a mass of greater or less bulk, in which few or no traces of the proper tissue of the organ in which it is contained are observable. If, on the contrary, it be uniformly disseminated throughout the texture of an organ, so as to transform it into a substance resembling a section of the mammary gland, or the udder of the cow when boiled, the appellation of *Mammary Sarcoma* was given to it by Mr. Abernethy. When it presents an appearance similar in colour and consistence to the substance of the brain, it was called *Medullary Sarcoma* by the same distinguished surgeon; *Matière Cérébriforme* or *Encephaloïde* by Laennec; *Spongoid Inflammation* by Mr. Burns. The *Milk-like* tumour of Dr. Monro; the *Soft Cancer* of various authors; and the *Pulpy* testicle of Dr. Baillie, are names which have been given to the same state.

Of all the varieties of cephaloma, the last is that in which a vascular organization is most conspicuous; and as the coats of the vessels with which it is supplied are remarkably delicate, the circulation of the blood through them is readily interrupted; hemorrhage from congestive rupture takes place, and the effused blood is mixed in greater or less quantity with the brain-like matter. From this accidental circumstance, together with the protrusion of this substance through the ulcerated integuments for example, in the form of a bleeding fungus, it has been described by Mr. Hey and also by Mr. Wardrop, under the appellation of *Fungus Hæmatodes*. Sir Astley Cooper calls it *Fungoid Disease.*"

Dr. Carswell justly remarks that although thus divided into those which are organized, and those which are not disposed to become so, it must be granted that the one sometimes passes into the other, and that we know of no

characters which will enable us to say, that the incipient deposit will or will not become subsequently organized. Thus scirrhus may pass into fungus hæmatodes, and we often meet with all the varieties of both species not only in the same individual, but also in the same organ.

We think there can be no question that these malignant diseases, as they are denominated, do frequently run into each other, that they may co-exist in the same individual, and that, looking at structural characters only, they frequently invade simultaneously the same organ. But there are other points to be considered besides apparent structure, in forming an opinion of the nature of a morbid growth. If, for instance, it be found that a tumor possess a structure very similar to that of scirrhus, but that it occurs under circumstances differing from those under which that disease occurs—that it runs a different course—and that, if removed, a similar production does not appear in other organs, we may reasonably conclude that such a tumor is not scirrhous, however slight the structural distinctions may be. The case that we have put is not an imaginary one. Tumors occur in the breasts of young females, that greatly resemble scirrhus in appearance, but, when removed, leave the patient permanently well. These and other considerations prove, we think, two things; first, that mere obvious structure is not sufficient to enable us to classify tumors; and, secondly, that much is yet to be learnt respecting varieties of structure.

Seat and Origin of Carcinoma.—If investigated in its earliest stage, we ascertain with greater or less facility, that the carcinomatous deposition becomes evident to us, either as a product of nutrition or secretion. In the former case, it is deposited like the nutritive element of the blood, enters into the molecular structure, and assumes the form and arrangement of the tissue or organ into which it is introduced. In the latter, it makes its appearance on a free surface after the manner of natural secretions, as on serous surfaces in general. Proceeding still further, in our researches, we find this substance existing not only in the molecular structure and on the free surface of organs, but also in the blood.

Dr. Carswell proceeds to describe the formation of carcinoma in the molecular structure of organs, and for this purpose he selects the liver and stomach. If we take the liver, the first change which is perceptible is a slight change of colour, observable within a very limited and well-defined space and distinctly seen to exist in the *acini*. This change of colour may take place in a single acinus, or in several of these bodies successively or simultaneously. The red or yellow colour which they naturally present gradually disappears and is succeeded by a pale milk white or straw colour, accompanied by an increase of their consistence. But the most important circumstance is, that while these changes of colour and consistence are taking place, the form and bulk of the acini remain unaltered, shewing, of course, that it is a mere transformation of the tissue, through the agency of nutrition. As we trace the transformation onwards, we can perceive the altered acini forming groups, the re-union of which constitutes masses of altered structure, of greater or less dimensions.

In the stomach, this alteration is chiefly witnessed in the muscular coat on account of the difference of colour between the muscular and cellular substance.

"The change of colour which accompanies the presence of the heterologous deposit in this tunic is hardly perceptible except in the muscular fibres. These, however, become pale and acquire an increase of consistence, but their bulk does not appear to be increased at first, and they retain their form and distribution. Such, also, is the state of the intermuscular cellular tissue at the same period, except, as I have said, as to colour, which is not sensibly changed on account of its being naturally pale. By-and-bye both acquire a greater or less increase of bulk, become remarkably distinct, and present that fibriform arrangement

hardness, and transparency which are regarded as so characteristic of scirrhus. At a more advanced period of the disease, we no longer trace this nutritive process of transformation; the muscular and cellular tissues being converted into a homogeneous mass, which is afterwards softened down, or assumes the mammary, medullary, or hæmatoid forms of carcinoma."

Dr. Carswell next alludes to the formation of carcinoma on serous surfaces, the most simple form, perhaps, which it presents. The heterologous material is found to be effused on the free surface of the pleura and peritoneum, without their having undergone any obvious previous change whatever. Multitudes of tumours are sometimes met with on these two surfaces, varying in bulk, consistence, and colour. Some of them are as large as a plum or an orange; others of the size of cherries or peas, and composed of a substance resembling pork, the mammary gland, brain, or a mixture of the latter, fibrine, and blood. Scattered among these larger masses are a number of smaller bodies, some of them so minute as hardly to be perceived by the naked eye; others varying from the size of a pin's head to that of millet or hempseed. They present the same characters as the former; even the smallest of them may be nearly as firm as cartilage or as soft as brain; pale, red or bloody.

Dr. Carswell believes that, under such circumstances, the constitutional origin of the disease, that is, the source of this production in the blood, must be apparent. Of the general constitutional origin of cancer we fear there can be no doubt; but, in some few cases, it certainly does appear to commence as a purely local disease. However, it would be occupying too much time to consider this question at length, and, practically speaking, we may safely admit the constitutional origin and character of the affection.

The last part of the subject which occupies the attention of Dr. Carswell is the formation of carcinoma in the blood. Dr. Carswell adduces the following facts, as furnishing strong evidence that the formation of this substance takes place in the blood, whether it be found in this fluid alone, or in other parts of the body at the same time: 1st, the presence of this substance in the vessels which ramify in carcinomatous tumours, or in their immediate vicinity; 2d, in the vessels of a portion, or of the whole of an organ, to the former of which this substance is exclusively confined, and can be traced from the trunks into the branches and capillaries; 3d, in vessels having no direct communication with an organ affected with the same disease, as, for example, when it is confined to a small extent of the vena portæ; and, lastly, in blood which has been effused into the cellular tissue and on the surface of organs. The divisions of the vascular system in which the carcinomatous substance has been observed, are the venous and capillary.

We cannot admit that these arguments of Dr. Carswell are quite satisfactory, indeed we would venture to suggest that he is too hasty at generalization. Carcinomatous matter, says he, exists primitively in the blood, and from it is secreted. As a proof of this, he remarks that we find it in the blood. But it is singular that it is only found in the returned blood, in the venous system. The veins are rather organs of absorption than secretion, and Dr. Carswell might almost as well maintain, that, because in a case of compound fracture, we find pus in the veins of the limb, the pus originated in the blood, and was not conveyed from the part to the vein, or the product of mere inflammation of the tunics of the vein. Dr. Carswell must see that analogy is against him, and we fear the *formation* of morbid growths or morbid alterations of structure, is not yet to be explained so simply as Dr. Carswell would wish us to believe. Dr. C. remarks that the presence of an organized product in the blood can have no other origin than the blood, and that it cannot be introduced into this fluid by absorption or otherwise, are facts so obvious that he will not attempt further illustration of them. We may be very obtuse, but really these facts are not obvious to us.

How can a product be organized in the blood—do we find organized products in that fluid—as liver, or lung, or cellular tissue, or cerebral substance seen floating about in this fluid prior to its deposition? We apprehend not. Dr. Carswell cannot understand how an organized product can be introduced into the veins by absorption. But then this organized product is found in the absorbent vessels, and if in them why not in the veins? Surely the entry is as easy in the one case as in the other.

"The appearances which the carcinomatous formation presents in the blood are very various, and sometimes perfectly similar to those which mark its presence in the substance or on the surface of organs. In large veins, such as the vena portæ and its branches, the emulgent vein, &c. it may present the lardaceous, mammary, medullary, or hæmatoid characters, all in the same venous trunk. These varieties of the carcinomatous formation may be found mixed together in minute quantities, or isolated into masses so conspicuous that we can readily distinguish them from one another; sometimes they lie merely in contact with the internal parietes of the vein; at other times they are united to the latter by means of a thin layer of colourless fibrine; or minute blood-vessels pass from the one into the other, and are often very numerous and remarkably conspicuous in the cerebriform matter."

Dr. Carswell concludes by a criticism of the theories of Hodgkin, Baron, Abernethy, Andral, and Cruveilhier. It is indeed easy to point out the weak points in any of these theories, not excepting Dr. Carswell's, and as he has failed in such excellent company, he may reasonably console himself. Any theory on this subject must necessarily be a weak one, because it attempts to explain an ultimate fact. All such attempts in physic have failed and must fail.

Dr. Carswell intends to dedicate another fasciculus to the description of the physical, chemical, anatomical, and physiological characters of carcinoma. We cannot leave the present without congratulating the author and the professional public on the manner in which it is executed, though, if we might take the liberty, we would again suggest to Dr. Carswell to confine himself as much as possible to rigorous observation and induction, and to divest a work devoted to facts of theoretical considerations. He will do most justice to his subject and himself by bearing this in mind.

XXI. RETENTION OF URINE PRODUCED BY IMPERFORATE HYMEN.*

This case is related by Mr. Coley, surgeon, of Bridgnorth. It is not uninteresting.

"March 25, 1832, I was requested to visit a young lady, aged 16, who resided at a considerable distance from this town. She had been ill three days and nights, with retention of urine; and her medical attendant had been under the necessity of relieving her by the introduction of the catheter, twice daily, during that period. The existence of so distressing a disease excited great apprehension; and my opinion was solicited respecting its nature and treatment. I found the cause of the ischury to consist of an imperforate hymen, which, by totally preventing the discharge of the menstrual fluid, had produced a mechanical obstruction in the urethra. The external orifice of the meatus urinarius was situated in a culde-sac, and the hymen was tense and slightly protruded. The bladder having been evacuated, I proceeded to examine the hypogastrium, where I discovered an obvious and considerable enlargement of the uterus of an oblong shape, extending nearly to the umbilicus. The lower part of the abdomen had been increasing in bulk during the last two years, and the breasts were fully developed; in short, she appeared to be in a state of pregnancy.

The patient being laid on her back, I pushed a double-edged scalpel through the hymen, which was very thick and tough; beginning at the upper part just

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* Provincial Medical and Surgical Transactions, Vol. I.

below the meatus. Nearly four pints of tar-like fluid gushed out; after which I continued the incision down to the perineum. An aperture was thus made capable of admitting two fingers, into which a plug of lint was introduced."

Before the whole of the menstrual fluid was drawn off the young lady became hysterical, and so continued for four hours. The discharge ceased in a few days, a piece of sponge was introduced to keep asunder the sides of the vagina at the incisions, and the wound was healed by the 16th April. The hysterical fits continued for some days longer, when profuse menstruation occurred, soon after which the hysteria subsided.

Mr. Coley remarks that he has seen many cases of incomplete obstruction, in which there is a minute aperture at the upper portion of the hymen, through which part of the urine is forced out in drops or in a small stream, with great pain, resembling that produced by stone in the bladder. As the imperfection exists from the time of birth it is usually discovered when the child has attained the age of three or four years. In the cases which Mr. Coley has witnessed, a free incision effected a permanent cure. Sometimes the membrane is found double, sometimes of extraordinary density.

XXII. Hysteria, Fatal.

In the twentieth fasciculus of his Principles of Obstetric Medicine, a work which we have often noticed, and which will form a valuable addition to obstetric works, an interesting instance of hysteria proving fatal is related by Dr. Davis. The case is taken from Villermay's work on Nervous Maladies, and as well authenticated facts of the sort are scarce, we are inclined to notice it.

A young woman, aged fifteen, presented the usual indications of ripened puberty. Her temperament was sanguineous; her figure was small, but well formed. She was active, alert, and cheerful; and she led the life of a domestic. When she was eight years old, she experienced an attack of convulsions, of which however she sustained no subsequent attacks until she arrived at the age of fourteen. She had then menstruated regularly, and in sufficient quantity, for about eight months; but pending her eighth period she became suppressed, in consequence of a fright. Nevertheless no great inconvenience was experienced at the time. On the next return of the function, however, the menstrual discharge presented itself only for a short time and in minute quantity, and was then immediately arrested. From that time forward she complained of feeling a general indisposition, accompanied by a sense of numbness in her lower extremities, thirst, and especially by expressions of concern for the interests of her situation as a servant. On the second day her case was aggravated towards evening by a painful sense of strangulation, such as might be produced by a tightly-drawn neckband or collar, and the respiration was consequently embarrassed. The hypogastric region became the seat of a marked fulness, and the extremities as well as the trunk of the body were repeatedly seized with convulsive movements. A strong spasmodic constriction of the pharynx prevented the patient from swallowing any liquid, although she was induced by much thirst to make strong and repeated efforts to accomplish that object. During this paroxysm she voided a great quantity of clear and limpid urine. On the third day, about mid-day, she was taken to the Hôtel-Dieu. Her sense of suffocation and her anxiety were then become very distressing; and she cried bitterly, complaining that she constantly felt as if being strangled. Her voice in the mean time was but little changed, and she moreover retained her reasoning faculties, and answered correctly to all the questions which were put to her. The convulsive movements of all the parts affected continued unmitigated. The abdomen was alternately elevated and depressed to a very remarkable degree. The poor patient constantly carried her hand to her neck, as if to remove the fatal collar. She constantly asked for something to drink, but her efforts to swallow were altogether ineffectual, the attempts in the

mean time being extremely painful to her. Her difficulty of breathing was also undescribably distressing to her. She was every moment threatened with suffocation. Her pulse was contracted, hard, frequent, and very irregular. The movements of the heart could be felt to present similar characters, and they were perceptible to the touch as well as to view. The skin was of a reddish hue, and moist with perspiration. The unfortunate patient died in about six hours after her reception into the hospital, in the midst of a violent exacerbation of her disorder. She complained of having been strangled to the very last moment of her life.

Nothing was done for this young woman, and, with this exception, and with the exception also of the nature of the result, the case resembles very closely one related by Dr. Graves in an article which we have noticed in the present number of this Journal. We pray our readers to compare the cases. The body of this young woman was examined after death. The right cavities of the heart and pulmonary artery were "enormously charged" with black blood. The veins of the cerebrum and sinuses were also so charged. There was really nothing else of the slightest consequence, and the death of the poor girl, coupled with the fact that nothing was done for her in the Hôtel Dieu, is a cutting and melancholy satire on the médecine expectante.

XXIII. THE MEMORIAL OF THE PHYSICIANS PRACTISING IN LONDON,

Sheweth,

That the Royal College of Physicians in London was instituted by Charter, granted by Henry VIII., for the purpose of watching over the Interests of medical science, and promoting the respectability of the medical profession.

That by certain By-Laws framed by the College of Physicians, the Right of Admission into that Body is confined to persons who have been educated at the Universities of Oxford, Cambridge, and Dublin.

Your Memorialists are humbly of opinion, that the Right of Admission into this Corporation ought not to depend upon *religious tests*, but upon proof of good moral character, and adequate general and professional knowledge.

That your Memorialists, who have received their education in the University of Edinburgh, or in Foreign Schools celebrated for Medical Instruction, are subjected to the operation of By-Laws, framed in opposition to their interests, and professional advancement; that they are compelled to pay a considerable sum of money to a Corporation with which they have no connexion, over whose funds they have no control, and with whose laws and proceedings they are quite unacquainted.

Were it required, your Memorialists would have no difficulty in showing the many evils affecting the respectability of their Profession, and the advancement of Medical Science, which result from the narrow and exclusive system of monopoly exercised by the College of Physicians; the only conceivable consequence of which they feel persuaded is, to create jealousies and dissensions.

That your Memorialists have much pain in referring to the numerous conflicts which persons, similarly circumstanced as themselves, have had to maintain against the encroachments of a Corporation, whose obvious interest it is to narrow the field of public competition.

Your Memorialists beg to represent, that the numerous and artificial divisions in their profession, are the result of the exclusive privileges conferred on the different Corporations, the evils resulting from which they are most anxious to prove.

Your Memorialists, therefore, humbly pray, that such general inquiry may be instituted into the state of the Medical Profession, as may lead to the framing of Laws conducive to the interest of its Members, as well as the advantage of the Public.

We trust that the foregoing petition will be numerously signed, and sincerely do we hope that a full and fair enquiry into the state of the profession in this country may be the result.

II.

Spirit of the Foreign Periodicals.

We purpose henceforward to devote an allotted and considerable space to this department, in order that our readers may see at a glance what their Continental neighbours are about. It is not that every fact thus narrated is important, nor every opinion true; but when information is so generally diffused as it is now—when we exercise such an influence upon the Continent, and the Continent reciprocally on us, it is surely a matter of laudable curiosity, if nothing more, to learn their sentiments on common things, and view the varieties of practice that varieties in education, habits, and institutions generate. It is more convenient for our readers, though less so for ourselves, that these scraps of foreign literature should be brought together and assembled in one place; for thus, at one coup d'œil, they may be said to command a prospect of a vast extent of country, instead of having it broken into numerous fragments by intervening obstacles. It is true that there may be less variety, but there is more consistency, and, in our opinion, a wider and a more extended utility. Without further preface, we shall pass at once to the matter before us.

I. Selections from a Report of the Labours of the Medical School of Abouzabel. Published by M. Clot Bey. Marseilles, 1832.

The majority of the diseases prevalent in Egypt originate in, or are connected in some measure with, irritations of the gastro-intestinal canal, and hence the therapœia of the Broussaian or physiological school is admirably fitted for their cure. Before my arrival, it was little known; but now the most sceptical have been converted to its truth; and the two great endemics of the country, viz. dysentery and ophthalmia, have especially illustrated its superior efficacy. Even the plague, at least the milder forms of it, has been brought under its sway; for although this pestilence does not always prevail epidemically, I am satisfied that it appears every year under the form of an intense gastro-enteritis, which is followed by buboes, or, as the Arabians term them, "hiars."

Scabies, tinea, and syphilis are common; but gonorrhœa is rare. Lepra, elephantiasis, hepatitis, mania, ague and rheumatism, and palpitations of the heart are among the diseases most frequently seen. The small-pox is almost always imported by the negroes from the interior of Africa.

Pleurisy, pneumonia, and phthisis are rare; and I have often remarked that strangers, who arrive with pectoral complaints, are always much benefited, and often cured, during their sojourn. M. Clot suggests the propriety of European physicians sending their patients to Egypt, instead of to Italy, Switzerland, &c. Rickets, aneurism, and cancer are infrequent. Among the surgical cases requiring operations are enumerated 58 of lithotomy, of which number only 6 were fatal; 20 of amputation, including one at the hip-joint, which, however, was unsuccessful; 4 of strangulated hernia; 1 of the removal of an enormous tumour, weighing 110 pounds, of the scrotum, and another of a carcinomatous tumour of the lower jaw, a great portion of which required to be cut out—both of these were fortunate; 2 cases of trepanning of the sternum, from which the patients recovered perfectly. Diseases of the eye are exceedingly prevalent, and especially the different forms and complications of cataract, pterygion, glaucoma, and staphyloma. Cataract is, in by far the greater number of cases, caused by preceding ophthalmia: the Arabians have, from time immemorial, practised an operation which resembles somewhat that of couching. Hydrocele is a very common disease; M. Clot states that upwards of 200 cases were operated upon in the hospital of Abouzabel during the space of seven years, and calcu-

lus of the bladder is far from being infrequent. The great success of my operations, says M. Clot, I attribute to the favourable climate of the country, to the temperament of the Arabians, which is little irritable, and also to their inaptitude for moral suffering. I have never seen tetanos follow any wound or injury, although my readers may probably know that it often did so in the French army, during their stay in Egypt.

It is worthy of record, that the homoiopathic mania has reached even the shores of the Nile. One of the apostles of this strange creed offered to the Viceroy, that he would instruct 30 of the pupils of our school for a reward of 30,000 talaries. At first he obtained a share of credit, and was permitted to make a few trials in the military hospital of Cairo. He selected nine cases of ophthalmia, taking care that in all of them the active stage had passed away; and also several cases of subacute dysentery, which had already been treated by antiphlogistic remedies; but, in spite of these very favourable circumstances, little or no benefit was afforded to the patients; and very soon the homoiopathic doctor was obliged to try his fortune elsewhere.

We are informed that, for many years after the foundation of the medical college of Abouzabel, there was no pharmaceutical school there, in consequence of a government one having been established at Cairo; but it has been subsequently deemed more prudent to transfer to Abouzabel both it and also the veterinary school, which had been founded at Rosetta, in the year 1243 of the Mahometan era. One good effect of these changes is, that the students have it now in their power to attend to natural philosophy, botany, chemistry, pharmacy, comparative anatomy, and veterinary medicine, during their stay at Abouzabel. In consequence of the austerity of Moslem manners, which do not allow males to assist or be present at accouchements, M. Clot contemplated the institution of a class for the instruction of midwives; he presented a report of his sentiments to the Pacha, and Mahomet-Ali forthwith ordered 10 female slaves to be educated for the purpose. M. Clot anticipates much good from this very recent establishment, and says, "We shall no longer see the most simple cases in midwifery followed by death nor hear that presentations of the leg or of the arm require the child to be mutilated to permit its birth. A "maternité" and a foundling hospital are also to be established immediately. Besides these very important changes, our indefatigable author has projected a plan of a magnificent college or university, to be erected in Alexandria, which from its natural and acquired advantages, is so much superior to Abouzabel, and where the earliest and most celebrated school of antiquity flourished—that school which had for its pupils Aristotle, Herophilus, Erasistratus and Galen.

Appended to the memoir, is the report of a proposition which the medical Bey has communicated to Mahomet Ali, on the subject of the re-population of Egypt. In the time of the Greeks and Romans, the number of inhabitants was from 10 to 12 millions—it is now reduced to three millions. This great falling off has been owing to frequent wars and revolutions; also to the prevalence of the plague, slavery, celibacy, polygamy, and pæderasty, and to the large military force, which has been kept up constantly of late years. One million of inhabitants cannot, in justice, support permanently more than ten thousand soldiers; but the Viceroy has had so many wars to wage in Haggiar, Sennaar, the Morea, Candia, and Syria that he has been obliged to retain an immense standing militia; and we must remember that the population of the country suffers not only from the numbers slain, but also by the rest being kept away from their homes. The plan which M. Clot suggests, is to import a vast number of negroes from the interior of Africa, or from Cordofan, Sennaar, Darfour, &c. and that these negroes should be employed as domestics and in-door servants, in the place of the natives, who should hence be encouraged rather to devote themselves to agricultural pursuits. This importation would

be a vast burden to the State, if defrayed by it alone; but M. Clot proposes that all persons in easy circumstances should be obliged to purchase their own servants, and that these servants must be always taken from the black population. Government might also enlist them in the army, and in this particular imitate the example of the Emperor of Morocco, who has a militia of a hundred thousand Negroes alone. Every Negro should be obliged to marry at the age of 25, in order that they might contribute to augment the population!! Our author is aware that he may be scandalized as an advocate of slavery; he abjures such a reproach, and founds his defence on the fact that these very Negroes whom he proposes should be imported into Egypt, are slaves already in Sennaar and Darfour, where they are badly treated and cruelly used. Moreover, says he, it is generally admitted that the Turks are by no means harsh masters, but rather that they treat their servants as they do their children, and almost always give them their liberty in course of time. As a matter of course, such as were enlisted would be treated as the other soldiers; and to the credit of the Pacha, several Negroes have already attained the rank of lieutenants and even of captains in the army.—*Trans. Medical.*

II. Professor Roux' opinion on the Cause of Death after very Painful Injuries.

A man was admitted into the La Charité Hospital, with an immense tumour on the upper and inner side of the thigh. The operation for its removal was very protracted and painful, in consequence of the deep adhesions to the ossa pubis and ischii. The patient died on the third day, in a state of alternate stupor and delirium. On dissection, the only morbid appearance observed was, an effusion of serum into the lateral ventricles of the brain. M. Roux stated, that in almost all cases where death is consequent upon very severe suffering, he has found an effusion of serum either between the membranes, especially between the arachnoid and pia mater, or in the lateral ventricles. He has very often noticed it in patients who have died from burns, and more frequently in children than in adults, who can better resist pain.—*Ibid.*

III. Severe Scald of the Mouth and Fauces from Boiling Liquor Potassæ.

A man engaged in the manufactory accidentally sucked in a mouthful of the boiling caustic ley. The effects were most dreadful; but under the judicious treatment of M. Bouillaud, who ordered repeated local and general depletions, he completely recovered.—*Ibid.*

IV. Amputation at the Hip-joint.

This most dreadful operation was performed by M. Blandin at the Hôpital Beaujon, in January, 1832. The patient was a young female, and the following is the report of the diseased state of the limb—we give the particulars to enable our readers to judge for themselves of the propriety of the operation. "The right knee was horribly hypertrophied, to four times at least its natural size; the swelling extended up the thigh as far as the trochanter, and down the leg, but became gradually less and less at a distance from the joint; the pain was dreadful, and defied all sedatives; the skin had become so thin by distention that it seemed ready to burst, and the superficial veins were much enlarged and very tortuous. The evening before her admission into the hospital, while turning in bed, the os femoris snapped at the lower third of its shaft, and this accident was followed by an aggravation of all the sufferings. M.M. Blandin and Marjolin concurred in the propriety of amputation at the hip. The femoral artery was first secured, a large internal flap made, and the divided arteries tied; the limb being then forcibly abducted and drawn down, the bone was removed from its socket, and the outer flap made

by one sweep of the knife. Six sutures were used to retain the edges together. On the fifth day there were appearances of sloughing of the wound, and the discharge was unhealthy. Death took place on the tenth day.

Examination of the Amputated Limb. The femur was diseased in all its length; both trochanters were involved, and even the neck of the bone was softened, and bathed with a sanies, which had seemingly dissolved its spongy texture; the condyles had become enormously enlarged and were also much softened; but the shaft of the bone was dryer and more brittle than in health. The soft parts were so completely changed that it is almost impossible to render any intelligible description of them; "tout était pêle-mêle," and was bathed, or rather macerated in an abominable sanies.

Dissection of the Body. Partial reunion of the stump had taken place, but here and there it was sloughy; the flaps had adhered above and below the acetabulum, leaving this uncovered and forming a large cavity for suppuration; two large fistulous canals extended upwards along the glutei, and another still larger than either of these ran up within the sheath of the iliacus internus as high as the middle of the iliac fossa; at one part the great sciatic nerve, to the extent of an inch, was surrounded with pus. A purulent collection was found in the pelvis, and communicated with the surface of the stump; the internal iliac vein was inflamed, softened, and contained pus. The viscera of the abdomen were healthy; the lungs at some parts presented the appearance of tuberculous matter infiltrated through their texture. M. Blandin was of opinion that it was not truly tuberculous matter, but rather the effect of certain changes induced by the purulent secretion from the inflamed iliac vein admitted into the general circulation. What corroborated this view was, that the liver presented patches of diseased alterations almost identical with those observed in the lungs. Now M. Blandin has found that in cases of ordinary phlebitis the liver is, of all organs with the exception of the lungs, the viscus most frequently the seat of purulent deposits.—*Ibid.*

Note. Many of our readers will probably agree with us, in considering the operation in the preceding case as improper and unwarrantable; and for this very plain reason; the disease had extended as high, if not higher than the hip-joint; and the incisions must have been made therefore through diseased parts. The description of the state of the limb before the operation, and the examination of it afterwards, leave no doubt on our minds, that an English surgeon would not, in such a case, have put his patient to the agonies of the knife. We strongly deprecate the thirst for operations, so common among many of the Continental surgeons. ED.

V. IGNORANCE OF A FRENCH HOSPITAL PHYSICIAN.

M. Pigeaux, in a memoir on blood-letting in diseases of the heart, observes —"almost constantly I have remarked that the treatment of Valsalva, when followed with all its rigour, has rendered the general condition of the patients worse; and more particularly in five cases which occurred at the La Charité, and of which I have kept notes; in these the severe depletions very evidently accelerated the fatal termination of a disease, which in two at least of the five, proved, on dissection, to have been only simple chlorosis!"—*Bullet. de Therap.*

VI. VARIOLA AFTER VACCINATION.

Dr. Terzachi reports that, from Feb. to August, 1831, 748 cases of variola were admitted into the Milan Hospital; that of these, 614 had been previously vaccinated; and that 45 cases proved fatal, or 7½ in the 100. Dr. Tinella has lately published an account of an epidemic variola which prevailed at Mantua; he is quite satisfied of the beneficial effects of vaccination; but strongly urges the propriety of repeating the operation every tenth year. If the vaccine virus

be introduced simultaneously with or immediately after the infection of variola, the vesicles of the one and the pustules of the other disease, are formed together, and pass through their different stages, unaffected by each other.—*Annali Univ.*

VII. Use of Turpentine in Sciatic Neuralgias.

M. Martinet has adduced a long catalogue of cases to shew the superior efficacy of small doses of the oil of turpentine. To prevent its acrid effects on the stomach and bowels, he recommends that it be always blended with some corrective excipient, such as honey, gum-arabic, magnesia, yolk of egg, &c. and the dose ordered is a drachm or two in divided doses, daily. As a matter of course a correct diagnosis must have been previously made, in order that we may be satisfied that there is no inflammation or organic disease of the nerves; under such circumstances we cannot reasonably expect a cure from the turpentine alone. If the drug vomits or purges to excess, opium should be added. In 40 cases of acute neuralgia, 34 were cured, 5 relieved, and one was not benefited. In 31 chronic cases, 24 were cured, 3 were relieved, and 4 experienced no advantage: 33 of the cases treated with the turpentine had resisted other remedies previously employed. The period generally required for the cure was from 5 to 12 days; in a few cases the medicine must be continued longer. Out of 58 cases 48 were sciatic, 3 crural, 4 brachial, and 3 facial neuralgias.—*Bull. de Therap.*

VIII. On the Re-production of the Crystalline Lens, after the Operations for Cataract.

We shall confine ourselves to describing shortly the actual observations and experiments narrated in the memoir of M. Mayer, and refer our readers for more extended details to the January number of the Archives Generales and Journal Complementaire, which have formed a new-year's marriage, and are to be associated in future. He examined the eye of an old woman, on whom the operation of couching had been performed several years previously. There was no trace of the depressed lens; the vitreous substance occupied its place, and immediately behind the anterior wall of the crystalline capsule, was observed the posterior wall or layer with the vitreous humor pressing forward upon it. The researches of others do not however agree with the statement, and M.M. Cottreau and Leroy d'Etioles have always found that the lens was really and perfectly reproduced in animals, after the operation of extraction. The following experiments, among many others, were performed by M. Mayer.

The lens was extracted from the left eye of a rabbit, which was killed three days afterwards. No trace of a new lens was found at this period, nor on the 4th, 5th, 6th, or 7th days; but on the 8th, the crystalline capsule contained a small ring of crystalline substance, which could be separated from the capsule. At the end of one month a large ring of crystalline substance occupied the place of the removed lens. In another rabbit, examined about the same time after the operation, a large white annular lens, with an opening in the centre, was found in the capsule, which adhered to this new lens. In eight weeks the new crystalline presented several white granular points arranged in a circle, having an opening in the middle; and in four months and a half it was not yet completely regenerated; for it was deficient at the centre, leaving there a rounded aperture, at the place where the capsule had been cut during the operation.

Soemmering has given us an account of four dissections, at different periods after the operation on the human subject.

In the first, the patient had been couched eight years and a half before his death. In the place of the crystalline capsule two semilunar whitish cheesy formations were formed, attached by their peripheral margin to the

zonula Zinnii, and floating free at the inner margin; they were doubtless the remains of the crystalline capsule. The new crystalline was transparent, gelatinous, and imperfectly formed. The former one had been completely absorbed, but a small piece of the original capsule was found imbedded in the vitreous humor.

CASE 2.—*Three Months after Couching.* In the place of the former lens Soemmering observed an annular transparent gelatinous deposit, imperfect at the centre, which was occupied with a fine, almost diaphanous and arachnoid membrane, situated right behind the pupil, and forming a septum between the aqueous and vitreous humors.

CASE 3.—*Two Years after Couching.* Similar appearances were discovered. A ring of transparent substance, of the consistence of jelly, in the situation of the lens of the left eye; in the right one, which had been also operated on, the new deposit was only semicircular, the upper part of the circle being deficient. Probably the cause of this was that, during the operation, the upper half of the capsule had been completely torn from its adhesions.

CASE 4.—*Three Years after Couching.* The annular "renflement," or new deposit, had been very regularly formed; it was slightly and equally convex on both its surfaces, and was quite free from any adhesions to the uvea.

It is to be kept in mind that in order to display the annular crystalline substance the eye must be immersed in strong alcohol, by which the new deposit is rendered slightly opaque. Soemmering was at first puzzled to determine whether it was really a substitute for the removed lens, or was merely a product of inflammation; but he was speedily satisfied that the former was the case. Sometimes the ring is imperfectly formed; and in other cases we find only isolated points or grains. These cannot be the debris of the original cataractous lens, as some have imagined, for the simple reason that these grains are perfectly transparent, and the cataract was opaque. The preceding facts sufficiently shew that there is a reproduction, although an imperfect one, of the crystalline lens; but we have reason to believe that an indispensable condition is a sound and healthy state of the capsule, and especially of its front layer; if this be either much torn and destroyed, or if it be rendered opaque by disease, there is no regeneration of the crystalline. In all probability, the secretion of the new substance is chiefly, if not altogether, from the inner surface of the anterior wall or layer of the capsule; and as this layer adheres intimately to the contained crystalline, no traces of the cavity or liquor of Morgagni can be henceforth discovered. The process of regeneration proceeds invariably from the circumference to the centre; and is always found interrupted at the place where the capsule has been cut, or lacerated during the operation;—the rent in the capsule is occupied with cellular substance. Hence the crystalline substance is never entirely reproduced, but always presents in the centre, or opposite to the injured part of its capsule, an opening which is filled up with a fine cellular tissue. The shape of the new crystalline is generally that of a three-quarter moon, the horns of which nearly touch each other. In the experiment on the rabbit, which was allowed to live for four months and a half after the operation of extraction, the new crystalline had this form, with a free space in the middle, occupied by a cellular web.

M. Leroy d'Etiolle and Soemmering state that they have found the new crystalline free and unadherent to its capsule; the observations which I have made do not coincide in this respect with theirs;—it is a point left open for examination. It is worthy of remark, that the mass of the new crystalline almost always exceeds that of the original; but that the entire eye very generally becomes somewhat shrunk and contracted for some time after the operation. This shrinking is found to extend even to the optic nerve, and that, too, beyond the decussation as far as

the thalamus. It is conjectured however, that in favorable cases the eye and its appendages may resume their original volume.—*Journ. Complem.*

IX. Lisfranc's Treatment of Amaurosis.

First of all, we should ascertain whether there are any symptoms of inflammatory fulness and activity in the eye or head;—as a matter of course, such cases require depletion; when, however, we have reason to believe that the disease is one rather of debility, Lisfranc strongly advises us to direct our attention in an especial manner, to stimulate the frontal and other branches of the fifth pair of nerves by means of repeated blistering over the eyebrows and temples. Should this fail, we must endeavour to excite the torpid organ by acting immediately on the ciliary nerves, any irritation of which is speedily propagated to the ophthalmic ganglion and the origin of the trigeminus. This is most effectually done by the application of stimulants to the cornea; and of these stimulants the nitrate of silver in substance is the best. The inferior segment of the cornea is to be lightly touched, till we perceive a whitish cloud;—the eye is then to be immediately washed with water. Considerable pain is felt; the whole apparatus of the eye is put into a state of so increased activity, that on the morrow a stranger might suppose that our patient laboured under acute ophthalmia. This treatment induces sometimes vomiting; and as it always occasions temporary contraction of the pupil, it must not be employed when there is a tendency to this evil. The operation requires to be repeated several times.—*Ibid.*

X. Obliteration of the Uterine Veins after Puerperal Fever.

M. Duploy has communicated an interesting paper on the pathology of metro-peritonitis or puerperal fever, and has adduced several observations to prove that the veins of the uterus become plugged up, and finally reduced to ligamentous cords, in cases of puerperal fever which have terminated favorably. As the attention of our readers was drawn in our last number to the morbid anatomy of this interesting disease, [vide review of Dr. Lee's work,] it is most useful to collate and compare the researches of the continental physicians with those made at home. Unfortunately, says M. Duploy, most of our patients have died from the effects of the absorption of the pus secreted from the uterine veins, with all the symptoms of complete typhus. On dissection, the vessels have been found lined with false membranes, and gorged with a purulent fluid, either alone, or mixed with blood. But where the patients have survived for a considerable time after the symptoms of the fever had been subdued, we have found the uterine veins in a very different condition. On making an incision through the substance of the uterus, we have observed several yellowish grey lines or bands traversing it in various directions; these bands proved on minute dissection to be obliterated veins—they have been noticed chiefly towards the sides or margins of the uterus. In all the cases where these appearances were found, the patients had previously laboured under symptoms of metro-peritonitis which had been subdued. We are therefore warranted in concluding that uterine phlebitis is not necessarily and invariably fatal, but is occasionally, as well as phlebitis occurring elsewhere, cured by the obstruction and subsequent conversion of the inflamed veins into impervious cords. Probably this fortunate issue is only to be expected when the affected vessels are small and few in number. I have never found the trunk of the hypogastric, or of the ovarian vein, completely obstructed. The following cases illustrate the above remarks.

Case 1. A woman, aged 19, was delivered at the Maternité on the 1st March, 1829. Symptoms of puerperal fever set in next day and continued for a week, but were at length subdued;

an obstinate diarrhœa however wore out her strength, and she died on the 10th of April, forty days after her confinement.

On dissection, the uterus was found to be well contracted upon itself, of a pale fleshy colour, except in the lateral parts of its anterior surface, which were of a deep brown, and marbled as it were with patches of ecchymosis.—When cut into at these points, numerous veins were found full of blood; but at the margins of the uterus, and just in front of the attachment of the broad ligaments, we observed small greyish cylinders or bands, which ramified through the substance of the organ; and on accurately tracing these, we were satisfied that they were obliterated veins.

Case 2. A servant, aged 17, was delivered on the 5th of February, and died on the 16th of the same month, with all the symptoms of malignant puerperal fever. On dissection the uterus appeared at first sight to be tolerably normal; but on cutting through its substance, near the margins, or lateral edges, the vessels were discovered to be full of solid concreted pus, somewhat resembling a false membrane, which quite obstructed their canals.

Case 3. A woman died three weeks after delivery. The uterus was found to be adhering anteriorly to the omentum, and posteriorly to the rectum; its inner surface was black, as if ecchymosed; its tissue not softened; when cut into, numerous grey bands were observed, passing in different directions; these bands were the veins which had become plugged with a firm tenacious substance.

The preceding three cases illustrate the author's positions;—the following is a striking specimen of a very intense uterine phlebitis extending even to the vena cava.

Case 4. A woman, aged 22, was delivered at the Maternité on the 14th April, 1829. The symptoms of puerperal fever were ushered in with violent shiverings on the following day. Active depletory measures were employed, but without avail; and she died comatose on the 27th.

Dissection. Well-marked ramollissement in the right hemisphere of the brain;—the uterus exteriorly appeared normal; its inner surface however was lined with a coating of concreted pus resembling a pseudo-membranous deposit. On the left side, some of the uterine veins were filled with pus, their coats hardened; on the right side, all the uterine veins and roots of the ovarian veins presented the same appearances; the trunk of the ovarian vein along its whole length, to its embouchure into the cava, contained purulent matter; its walls were much thickened, and almost of a fibrous consistence, and lined with a false membrane; the vena cava was greatly distended, and plugged up with a large clot, which at its upper and lower extremities was merely sanguineous, but at the middle, corresponding to the entrance of the ovarian vein, presented a dirty grey, half-bloody, half-purulent appearance.

XI. OBSERVATIONS ON THE MORBID ANATOMY OF OTHER VISCERA IN PUERPERAL FEVER.

LYMPHATIC SYSTEM. Many suppose that it requires very minute dissection to discover the morbid condition of the lymphatics of the womb;—it is quite a mistake. When they contain pus, they are seen immediately under the peritoneal coat, like greyish white lines, alternately distended and contracted, on the anterior and posterior surfaces, and on the lateral margins of the womb sometimes even along the broad ligaments to the ovarian veins, round which they form a complete network; occasionally, they are so much dilated at points, that they might contain moderate-sized peas. In a few cases, they may be easily traced as far as the lumbar glands, which, when cut into, are then found softened and soaked with pus. M. Tonnellé twice found purulent matter in the thoracic duct. The suppuration of the lymphatics exist

sometimes alone, sometimes simultaneously with a similar state of the veins. In all the cases in which we have found, on dissection, the lymphatics in a diseased state, the symptoms during life were those of typhus, but not of such an aggravated type as accompanies the suppuration of the veins, in consequence, probably, of the communication with the circulating mass of blood being not so immediate in the former, as in the latter case.

The Fallopian tubes present generally appearances of active inflammation; they are found swollen, œdematous, invested with lymph, and adhering to the surrounding parts; when cut open, they sometimes contain purulent matter, which may be squeezed along their tubes, through their fringed extremities, into the cavity of the peritoneum, and thus occasions (so says Cruveilhier), peritonitis. The ovaries are variously affected; they become red, and, as it were, ecchymosed; sometimes they are atrophied, but more frequently much enlarged in bulk; this increase may be owing to a serous infiltration, to a suppuration of their substance, or to a general deposition of lymph; sometimes nothing remains but their investing membrane, and the ovary forms one entire abscess; at other times, there are numerous smaller ones between its lobules; the pus may be either fluid, or so nearly concrete as to crumble between the fingers. Both ovaries are in most cases affected, although in different degrees. In five cases only, out of 105 dissections, were the lungs found diseased; their substance presented the red and grey hepatization, and in one example numerous vomicæ were discovered, such as are often observed in the bodies of those who have died of ordinary phlebitis. In a great number of cases, I have found the mucous coat of the stomach quite pulpy and decayed at particular points —in one case a perforation existed. M. Desormeaux has repeatedly met with spontaneous perforations of the stomach, in women dying in childbed. M. Dugès has observed them in 10 cases out of 266 patients, who died of puerperal fever at the Maternité. He regards it as an effect rather of chemical softening and solution, than of ulceration or gangrene; and formed his opinion on the absence of any marked gastric symptom during life, and of any adhesions or redness around the wound —on the softening and thinning of such parts of the small intestines as are bathed with the brown mucous matters effused round the perforation; and on the mode in which the destruction seems to be propagated by simple contiguity, and not at all by the continuity of structure. I have thus observed, says he, in a case where a perforation existed near to the large end of the stomach, the adjacent portions of the liver and spleen softened, brown, and deprived of their serous coat; the diaphragm, and even the pleura, perforated opposite to the opening in the stomach; the mediastinum partially dissolved, the lungs softened and laid bare, where they had been in contact with the brown viscid sanies. These spontaneous perforations may, therefore, be regarded as the effects of a true chemical solution of the parietes of the stomach. The blood in the heart and large veins is generally found thin and pale, and the crassamentum is loose and easily broken down.—*Journ. Complem.*

XII. On Hydatids, and their Conversion into Tubercles.

M. Kuhn has lately read before the French Academy a memoir on acephalocysts, and the manner in which these parasitical productions give rise to tubercles. He holds the opinion of Laennec, Bremser, and others, that they are to be considered as truly of an animal nature; and draws a distinction between those found in the human body, from what are often seen in sheep and other lower animals; the former, says he, are always propagated by internal buds, or growths which are thrown off from the inner surface of the original hydatid, and may be, therefore, denominated "endogenous;" they may be compared to a nest of boxes, one within the other, whereas the latter produce buds only on their outer surface, and are, therefore, "exogenous." It

was after a very careful examination of the lungs of oxen, which had died of a species of phthisis called "pommelière," that M. Kuhn was led to the belief of the degeneration or conversion of hydatids into tubercles. The hydatids, by their irritation, cause cysts to be formed around them; these cysts become stronger, fibrous, or even cartilaginous; meanwhile, the acephalocysts enlarge by serous imbibition, and multiply by buds from their inner surface; these again, in course of time, give rise to others, the whole nest being contained in one bag. From the inside of this bag is secreted a yellowish viscid matter, which becomes thicker and thicker; M. Kuhn regards it as the primitive tuberculous deposit: it gradually solidifies, and, with a simultaneous shrinking of the cyst, tends to squeeze and kill the enclosed animals, thus giving rise to a nucleus of tubercles. Sometimes the tubercles are not entirely filled up, but are hollow, and we observe only the shell or dried husk of the acephalocyst; we may even separate the thin layer of the animal from the debris within, by immersing some of the tubercles in water. M. Kuhn has enriched his memoir with beautiful illustrative drawings; they throw much light on the etiology of the tubercles which are found in the lungs and liver of ruminating animals. The co-existence of hydatids and tubercles, in the same organs, is a fact at once curious and most interesting. The subject is one of much importance, and deserves future examination.—*Révue Medicale.*

XIII. NEW SPECULUM UTERI, AND CURE OF SOME CASES OF STERILITY.

M. Melier has lately suggested an improvement on the speculum uteri; it consists in adding a solid moveable cylinder of smooth wood, enclosed within the speculum, and projecting with a rounded head beyond its vaginal extremity. The great advantage of this is, that the folds of the vagina are readily extended without any pain, and the instrument is easily conveyed up to the cervix uteri; the inner cylinder is then withdrawn. M. Melier strongly insists upon the good effects of injections, conveyed into the cavity of the womb, in many diseases; and as barrenness is, no doubt, very often the consequence of a neglected inflammation of the cervix uteri, he suggests the propriety of using them "pour rendre féconde des femmes jusqu'ici steriles." In one case, M. Melier, by means of his improved speculum, detected an engorgement of the cervix uteri; and, as he considered that this was the only obstacle to conception, he advised local emollients, discutients, and leeching, soon after the use of which the lady became pregnant of her first child.—*Journ. Hebdom.*

XIV. INDUCTION OF PREMATURE LABOUR BY MEANS OF A SPONGE AND BY PUNCTURE.

Case 1. Is that of a woman, aged 31, in whom the pelvis was too small to permit the passage of a full-grown child. Premature labour was induced in the eighth month. A plug of sponge an inch long, and of the size of a goose's quill was cautiously introduced into the cervix uteri, and left there. In the course of three hours, some short pains were felt; they alternately returned and disappeared till the evening, when the plug was withdrawn by means of a thread secured to it. The operation was repeated four times, and on the third evening labour regularly commenced; both mother and child did well.

Case 2. The patient, a young female, aged 17, was the victim of very severe "eclampsia puerperarum," which threatened a fatal termination. Professor Lovati decided on bringing on premature labour; he punctured the membranes with a trocar, and discharged the liquor amnii. The labour did not commence till 29 hours after the operation, and the patient ultimately recovered.

Remarks. The professor prefers generally the employment of the sponge, as in the first case, to puncturing the

membranes, because the escape of the water, before labour comes on, frequently renders that tedious and painful. He objects to the methods of frictions over the uterus, of irritating the cervix uteri, and of separating the bag of membranes from its attachment round the cervix. He, however, admits that in cases which require very prompt delivery, as in the second one reported, we must resort to puncturing the membranes, as the use of the sponge is too tedious.

It is rather singular that the operation of inducing premature labour is inhibited by law in France.—*Annali Univ.*

XV. Malignant Carbuncle in Italy.

Dr. Gullo informs us that, in Calabria and other provinces of Naples, the cattle-dealers, butchers and others of the lower classes are frequently afflicted with a very dangerous carbuncle, known by the name of the "carbuncolo tristo." It appears at first as a round pustule, not unlike that of vaccination, of a livid red colour, black in the centre, the edges elevated and covered with vesicles. It often proves fatal in three or four days, if neglected. The cause is the direct introduction of a putrid virus into any pricks or wounds when cutting up the cattle for market.

Dr. G. has found the following treatment most successful:—he makes several incisions on the edges, and a deep one through the centre of the carbuncle, and after wiping away the blood and sanies, sprinkles the wounds freely with powdered corrosive sublimate; lays on a plaster composed of four grains of the same mixed with the yolk of an egg. In 24 hours a deep eschar is formed, suppuration begins, and in seven or eight days the ulcer is healed.—*Ibid.*

XVI. Extemporaneous Vesication.

M. Pigeaux recommends the following method. Apply a dossil of lint, well wet with spirits of wine, to the part, and set fire to it. In a few seconds the epidermis will be found to be detached, and we can then remove it with our nail. The operation is very speedy and not painful.—*Revue Medical.*

XVII. Remedies against Scrofula.

Hufeland very highly lauds the good effects of the Æthiop's mineral, or black sulphuret of mercury, combined with a little magnesia and tinct. rhubarb. Along with occasional baths it constitutes the treatment which he has found to be by far the most efficacious in strumous affections of the skin, enlarged glands, ophthalmias, and intestinal complaints.

Boyer, and other eminent French surgeons have much faith in the internal and extenal use of the subcarbonate of potass. The solution is employed as baths, lotions, and injections; when exhibited inwardly, it is advantageously combined with the tincture of gentian. —*Ibid.*

XVIII. Insanity in Italy.

Mental derangement is much less common in Italy than in more northern countries, as the following table shews.

	Population.	No. Insane.
Italy	16,789,000	3,441
France	32,000,000	32,000
England.....	12,700,000	16,222
Wales.....	817,148	896
Scotland.....	2,093,454	3,652
State of N. York	1,617,458	2,240

We must admit that there is no doubt a great number of insane persons in different parts of Italy who are not in any asylums, and are therefore not included in the number of 3441, but even supposing that there is a third more to be added, the proportion is very strikingly inferior, and is a proof, among others, that insanity is the less prevalent in a country, as it is the more tranquil and the less agitated by the wants and desires of civilization. In Turkey, Egypt, Russia, &c. the number of lunatics is very small, and in France and England very large. It is greater in the North than in the South of Italy. Pellagra

is a very common cause of it.—*Journ. Complem.*

XIX. TWO EXTRAORDINARY CASES OF FASTING.

Dr. Schmalz, of Dresden, in a former No. of Hufeland's Journal, has related two very singular examples of abstinence from all food, protracted for an almost incredible length of time. We must remember, however, that he saw both individuals, and had an opportunity of personally ascertaining the particulars, and moreover the first case was the object of a Government enquiry.

Angelica Vlies was born in the neighbourhood of Delft, in South Holland, on 20th August, 1787. In her early years her constitution was very feeble and delicate, and she was much subject to cramps, induced by intestinal worms, which she voided both upwards and downwards in great quantities. She enjoyed tolerable health till 1811, about which time she was first seized with violent hysterical paroxysms; during these the bowels were obstinately confined. Subsequently she had repeated attacks of chronic enteritis, and her appetite, which had been throughout very sparing, now began to fail altogether. At one time better, and at another time worse, she continued in the above state till May, 1818, when she discontinued the use of solid food entirely, and took nothing but drinks, chiefly whey. All medicines were rejected by vomiting as soon as swallowed. For upwards of four years she tasted nothing solid, with the exception occasionally of a little fish and salad, which she sucked, but never swallowed. In the Spring of 1822, the attack of hysteria became so violent as to threaten death; an enema was given on the 10th of March; the bowels and also the bladder were then relieved; and this was the last time that any regular evacuation of stool or of urine took place. About this time she refused all nourishment whatsoever, fluid as well as solid; and now the catamenia which had hitherto been regular, although scanty, ceased. She frequently moistened her mouth with a little cold water to abate the burning heat she felt there. In July, 1822, an erysipelas appeared on the abdomen; it was relieved by the constant use of bread and milk poultices. In the following year she had a severe attack of dyspnœa, and fixed pain in the left side of the chest. Her physician, Dr. Grootenbeer, ordered a blister. In 1824 she had repeated seizures of subacute arteritis; in 1825 these seizures were neither so frequent nor so severe. In October of this year she voided, after most excruciating suffering, a small quantity of urine and fæces; during 1826 she made urine twice, and at each time only a few drops. Thus, from the 10th March, 1822, to this period she had had relief only once by stool, and three times by urine. The Dutch medical commission were very anxious at this time to induce her to remove to the Hague, in order that an opportunity might be had of strictly inquiring into her case; she would not however consent to this; but permitted four nurses to wait upon her alternately for the space of a month; the expense of their attendance was defrayed by Government. Soon afterwards a memoir was drawn up by Dr. Vorstman, and published at Delft, 1827. According to the authentic reports of the nurses, Angelica took no food, fluid or solid, from Nov. 11th to Dec. 9th. During this time, she used to moisten her mouth with water, tea, or whey; but she invariably spat the fluid out again, and the quantity was thus frequently somewhat increased, and certainly never diminished; she had no evacuation by stool or urine, but had occasionally belchings of wind. During the days, she sewed and amused herself with reading. She rose, or rather was lifted from bed, at 9, a.m. and was carried back at 11, p.m.; but she slept very little, being much distressed with headache, swoonings, and cramp. Her age at this time was 41, but her appearance indicated more than 60 years, her face being shrivelled, and her eyes dull and lustreless; her tongue was clean and dry, the skin was parched; the pulse normal in frequency, but

exceedingly weak and small; the sensibility of the cutaneous, and perhaps also of the deeper nerves, was so much impaired, that she was scarcely aware of her skin being pinched or pricked. Every hour and a half she was seized with a shivering, followed by a convulsive, lateral agitation of the head; these fits lasted generally for about two minutes.

Dr. Schmalz (the reporter of the case) visited her in Sept. 1828, and had an opportunity of being perfectly satisfied with the truth of the preceding statements; she told him that she had not eaten nor drunk any thing since the report of the medical commission, nearly two years before; and if we go back, we shall find that this extraordinary abstinence had now lasted six years and a half, from March, 1822. The patient told Dr. S. that she would very willingly take food, if she could in any way swallow it, but that this effort was impracticable to her. Here the report ceases, and Angelica was still alive at the date of the report.

Case 2.—*History of a Female who lived upwards of 2½ Years without Food.* Professor Ricci, of Turin, has published a full detail of this case in the Repertorio di Medecina, di Chirurgia et di Chimica di Torino.

Anna Garbero, aged 40, had hitherto enjoyed moderately good health, although her appetite had been always remarkably sparing; her food consisted generally of vegetables only once a day, and the bowels were not usually relieved above twice a week. Gradually the appetite became less and less, and once she passed 40 days without touching any solid or fluid aliment. But it was not till Sept. 1825, that a total inappetence for food came on; it was after a very scanty meal, consisting of only a mouthful or two of cabbage and a draught of wine and water, that she was seized at once with intense gastralgia, which continued for some time, till copious vomiting was induced; from this date she was unable to swallow any thing, and even her spittle was thrown back when she tried to allow it to pass down. Up to the 7th of the succeeding January, she neither eat, drank, nor had any relief by urine or by stool: the only appreciable evacuation was that of the catamenia, which, though very sparing, returned regularly.

Dr. Schmalz visited her at this period; he found her so emaciated, that she seemed a mere skeleton, over which a dry skin had been forcibly stretched. The skin was almost quite insensible to pricking, or to the strongest pressure; the limbs were cold and corpse-like; the pulse small and scarcely perceptible, but yet regular in frequency. The patient was quite willing to make an effort, at any time desired, to swallow food, but it was of no avail; and at length the mere sight of any victuals, however simple, brought on most painful vomitings. Things continued so till the end of June, at which time she became insensible and lethargic; this state of apathy continued till the 25th of the following November, when she quite suddenly and unexpectedly recovered her senses and speech. Her strength became weaker and weaker, and finally was exhausted in death on the 19th May, 1828.

The body was examined in the presence of Professors Rolando and Gallo, by whom a very interesting memoir was published at Turin; we give only the more interesting and illustrative details. The omentum majus was found drawn strongly downwards, and had become adherent to the brim of the pelvis, thus leaving the small intestines quite uncovered. This change had been caused by the falling down of the transverse colon, which was lying in the pelvic cavity; it was distended with hard fæces; the small intestines were, on the contrary, contracted to mere cords. On carefully tracing the colon, it was found that the canal of the descending portion was so much obstructed by the swelling of its mucous lining, that the fæces could only with difficulty be forced along; the obstruction was still greater at the commencement of the rectum, and completely prevented the transit of any solid matters. The contents of the ascending colon were more fluid, of a dark green, meconium-like colour, and most intolerably fetid; two

lumbrici and several ascarides were found in the bowels.

The rationale or etiology of the preceding case appears sufficiently simple. We conceive that a chronic inflammation of the colon and rectum had been originally caused by exposure to the inclemencies of the weather, for the patient was a beggar; thus, not only was the appetite directly impaired, but also the passage of the feculent matters obstructed, and the general health became more and more deranged in consequence; complete anorexia was the consequence of the accumulation of the fæces; the colon was dragged down by the weight, and, at the same time, the stomach and œsophagus were necessarily displaced in a similar direction, and this displacement must have seriously injured their functions. Besides, traces of a slow inflammation of the mucous coats of the small bowels, and also of the stomach, were found upon dissection; and our readers need not be reminded of the effects which we daily observe to flow from such a morbid state. In short, we are to regard the preceding case as one of the melancholy results of neglected sub-acute enteritis, originally of the rectum and sigmoid flexure, and subsequently of the rest of the canal.—*Journ. der Pract. Heilkunde.*

XX. CASE OF EXTRAORDINARY CONGENITAL BULIMIA.

Anne Denise was born in 1786. From her earliest years her appetite was most voracious, requiring more than four times the allowance of other children. She menstruated at 7 years of age, and, at this period, all the other attributes of puberty were developed. As she grew older, her appetite became more insatiable; she was dismissed from school because she devoured the food of her schoolmates. She therefore gave lessons herself, and the only reward that she wanted for her instruction was meat and bread. At this time she eat 10 lbs. of bread daily. She could not, however, make sufficient by her present employment, and, therefore, she engaged as a servant in an hotel. Several times she had been arrested for stealing loaves from bakers' shops; and at length she was reduced to beggary, as no person would keep her in their employment. She used to wander about the streets in Paris, devouring all the refuse of food which she found at different doors. A great variety of remedies had been ineffectually employed to overcome this morbid hunger. She was admitted into the La Salpetrière under MM. Esquirol and Amussat, for relief from epileptic attacks, to which she had been for several years subject. At that time she consumed from eight to ten pounds of bread daily; she drank very little. The bowels were confined; and she had two or three attacks of hæmatemesis every month. Occasionally her appetite became prodigiously increased, and at these times she would devour 24 pounds of bread in the course of a night; she was literally mad with hunger at these periods, so that if she was thwarted, or food refused, she would begin to chew her clothes, or whatever she could get hold of. During these paroxysms of bulimia, the epigastrium was found to be tender, and this tenderness was increased by pressure, and a profuse vomiting of blood generally ensued. This "grande faim" recurred only once a year, and always on the 9th of February. In the course of 24 hours, she has been known to have devoured 32 pounds and upwards of food; eating and vomiting blood alternately, till she fell down quite exhausted. M. Rostan, in 1819, tried various means, chiefly antiphlogistic, with only temporary benefit: ice was administered inwardly, and, for a time, considerably abated the fury of her hunger.

In 1823 she consulted M. Descuret, (the reporter of the case,) with the view of ascertaining whether there were any intestinal worms; he administered purgatives;—several pieces of tænia were expelled. The appetite was considerably diminished, and she was satisfied with 5lbs. of bread, and two or three basons of soup daily; and the "grande faim" did not take place this year, and indeed did not return until 1828.

As her hunger decreased, she became intolerably addicted to the abuse of spirits, which in time brought on such a depravation of appetite, that she would devour the raw lights of the slaughtered animals, and afterwards literally brouse upon grass. In July, 1828, having gone to her "favourite pasturage"!! she collected a quantity of grass and buttercups (ranunculus acris), which she eat for supper. During the night, she was seized with torturing pains of the abdomen—jaundice ensued, and she died in a few days.

Dissection. The stomach was small; the mucous membrane of it, and also of the intestines, was inflamed in patches, but otherwise healthy; the liver was very large; the other viscera sound. The condyles of the inferior maxilla were literally worn away!! For further particulars, we refer our readers to the October No. of Broussais'* *Annales de la Med.*

XXI. Arteritis and Spontaneous Gangrene of the Right Lower Extremity—Arteries and Veins plugged up with Coagula.

A girl, aged 17, previously in good health, was suddenly seized with shiverings, severe pains in the right leg, and especially in the foot of that side; the pains were so severe, that the patient compared them to tearing the nails from the flesh: in a few days the temperature of the limb began to lower and the foot assumed a blueish hue; her sufferings were not at all abated, in spite of bleeding and repeated leechings, &c. She entered La Charité about a fortnight after the first seizure. The constitutional symptoms were those of general feverishness and malaise; and the pains in the foot, leg, and lower part of the thigh were so intense, that the slightest motion caused her to scream out;—the skin of the toes and instep presented some purplish blotches, and when felt by the hand, the temperature of the limb, up nearly as far as the knee, was much lower than that of the other one. No pulsations could be perceived in the anterior tibial artery on the instep, nor yet in the posterior, tibial, peroneal, and popliteal arteries; they were, however, sensible at the upper part of the thigh. Bleeding, general and local, emollients, and opiates were prescribed, but without relief; the blood when examined was of a gooseberry-jelly colour, and stained the linen with pale-red spots. The purple blotches extended up the limb, and the temperature became still lower. The constitutional symptoms soon assumed a more formidable aspect; the breathing was short and anxious; there was intolerable anguish and repeated vomitings and hiccup, and no sleep could be procured by any sedatives. Cramps and pains were felt also in the left limb, which was swollen and tender. On the fourth day after her admission into the hospital, the whole right foot was of a uniform brown colour, the epidermis was peeling off, and a gangrenous odour arose from it. She died on the following day.

Dissection. The right foot was of a port wine colour at some points, and at others was perfectly black, especially around the toes, where the skin was hard and dried like leather; the subcutaneous cellular tissue was infiltrated with serum as far up as the lower part of the thigh; the muscles of the foot and leg were quite soaked with it, and resembled much the appearance of half decayed flesh. The left limb was also œdematous. The blood-vessels on the right side presented the following appearances; the crural artery from the groin to the ham was converted into a hard cord, whitish outwardly, and lined and plugged up with a dirty white friable coagulum, which at some points adhered to the inner surface of the tube. Similar appearances were found in the rami perforantes of the femoral, in the two tibials and in the fibular arteries; the internal surface of all these vessels was of a marked livid red colour; the inner coat was not however lacerable,

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* It is stated that the phrenological development of this woman's cranium, at the organ of alimentiveness, was unusually large.

nor very evidently diseased; the vasa vasorum were not more developed than natural, and the surrounding cellular tissue was healthy. All the veins of the right foot were plugged up with coagula, some of a deep black, others of a greyish colour; the lower third of the internal saphena was also obstructed similarly. On tracing up the external saphena, the tibial and fibular veins of the crural, and even along the femoral, and external, and common iliacs to their junction with the vena cava, softened coagula was found in all, partially filling up their tubes.

The large nerves of the right limb were much redder than usual, and seemed as if injected with venous blood. The arteries of the left limb were sound, but the veins from the foot up to the common iliac, and even to its junction with the vena cava at different parts of their course contained softened broken down coagula.

The medullary substance of the brain presented the curious appearance of circular red circumscribed patches at various parts; in each of these circles the central point was of a darker hue than the circumference, so that they were not unlike to petechiæ on the skin. The lungs were œdematous; the pulmonary veins contained fibrous clots, which adhered feebly to the walls of these vessels; the right ventricle of the heart was occupied by one large coagulum, which had all the appearance of gooseberry jelly. Numerous small petechial spots existed on the pleuræ, costalis et pulmonalis.

Remarks. We have observed that the lining surface of the arteries of the right limb was found reddened, but that there was no other sign or mark of morbid change in it. It has been much disputed by pathologists whether we are to admit this appearance as a test of preceding arteritis: Haller, Meckel, Bouillaud, Broussais, and others contend that it is; whereas, Corvisart, Laennec and Hodgson, Andral, &c. are of a different opinion, and assert that it is a "cadaveric phenomenon."

The following valuable observations are taken from the article "Arteritis," in the Dictionnaire de Médecine, et de Chirurgie pratique. "The redness may be wanting in true inflammation of the arterial tubes; and on the other hand it may be often observed, where no inflammation had ever existed; we not unfrequently see it in examining bodies which are partially putrid; and in these the imbibition of the bloody serum is no doubt the cause of the redness. Thus, we are not to consider the redness and swelling as pathognomonic morbid phenomena; nor yet, should they be wholly discarded. It must be admitted, however, that in by far the greater number of cases of arteritis, the redness, if it does exist, is not caused by the injection of the vasa vasorum, but rather by a tincture, or as it were a fixing of the colouring matter of the blood on the internal surface of the vessels; and that therefore this inflammatory blush does not essentially differ from the cadaveric imbibition."

Cruveilhier is of the same opinion as Bouillaud, the author of the article in question; he does not consider the mere presence of a red colouring of the inner coats of the arteries as characteristic of inflammation; we should find at the same time a pencilled injection of the vasa vasorum in the cellular coat of the vessels, and also coagula adhering more or less firmly to their inner surface; it is this last appearance which, according to Cruveilhier, is to be depended upon chiefly. Gendrin, Delpech, and Dubreuil, state, that in arteritis, the lining surface of the vessels is red, has lost its glistening smoothness and polish, is somewhat rough or wrinkled, and may be readily detached, and that the other tunics are swelled and softened. The subject is still open to difference of opinion. Cruveilhier, as stated above, considers that the essential or pathognomic character of inflamed arteries is, that the blood within them is coagulated.

But we must be on our guard, lest we are led to believe that this change in the blood is found in all inflamed arteries; this is certainly not the case, as is fully established by M. Barde, in the first vol. of the Revue Medicale, and by M. Bouillaud, in his treatise on

fevers. On the contrary, Haller expressly states — "In vasis etiam vivi corporis sanguis coit," and the truth of the remark is confirmed by every one.

M. Alibert, in his inaugural thesis, gives it as his opinion, that in cases of gangrene with arteritis, the formation of the clots precedes, and actually occasions by their irritation, the inflammatory state of the lining membrane of the arteries. Several very interesting examples are detailed in this thesis; in the 2d and 3rd cases softening of the brain was found, with the morbid changes in the veins of the mortified extremity; and in the latter of these two cases an adherent clot was found in the left auricle; in another case, a clot was found in the pulmonary artery, and in a subsequent one, these sanguineous concretions existed not only in the vessels of the sphacelated limb, but also in the aorta, and in all its branches given off below the diaphragm; and in the common, internal, and external iliacs. Besides the venous trunk on the surface of the brain, and of the dura mater contained coagula; and at the upper and back part of the right hemisphere, a large black spot, two inches at least across, was observed; the texture of the brain was here exceedingly softened, and quite of a creamy consistence.—*Archiv. Gener.*

XXII. Quinine successfully used against Toothache.

Toothache is not unfrequently periodical, and will continue to harass a patient long, if the usual anti-odontalgies are only used; many a sound tooth has been extracted, without the least relief to the suffering. Quinine, in such cases as are obviously intermittent, will almost always cure the pain as rapidly, and as effectually, as it does an ague. In short, all diseases in which there are periodic invasions and remissions, even in hectic, and in intermittent fevers dependent upon urinary disorders, the bark seldom fails to relieve for the time, if it cannot effect a cure.

XXIII. Preservation of Leeches by Feeding them with Sugar.

The attention of the Academy of Medicine has been lately called to this subject by a chemist. A commission was appointed to investigate particulars, and they have given in their report, which, however, is not favourable to the proposal.

The chemist was of opinion, that the blood which we so frequently find in the water in which the leeches are kept is not disgorged, but flows from the wounds which the animals inflict on each other when huddled together; the commission doubt the accuracy of this. A great error has very generally been committed, in supposing that one of the causes of the loss of so many leeches, is the putrefaction of the "mucosities which exude from their bodies;" now these, so called mucosities, are in fact the epidermes, which are regularly thrown off at intervals, in the same manner as the scarf-skin of a snake. The impressions of the rings of the leech are quite obvious on this mucosity; it is detached first towards the head, and the animal escapes from it as from a sheath, which still adheres for a short time to the tail, so that we often see the leeches swimming about with this membranous appendage.—*Bullet. Gen.*

XXIV. Gangrene of the Lungs.

A female was admitted into La Charité under Professor Bouillaud, with symptoms of severe bronchitis. Active depletion arrested the disease, and she was speedily restored to health; but a second attack, within a month, obliged her to return to the hospital on the 24th of January last. On the following day, the extreme fetor of the sputa and of the breath of the patient, when she forcibly expired, induced M. Bouillaud to suspect gangrene of the lungs; the fetor was so horrible, that chloride of lime was required to be kept constantly round her bed. She was largely bled and leeched, but the sputa retained their offensive smell. On the 4th Feb. she expectorated an immense quantity

of fetid sputa; there was then the greatest prostration of strength. On the 11th, the inside of the mouth was covered with aphthæ and diphtheritic crusts, and in the evening she vomited a large cupful of clotted blood. She died on the 13th.

Dissection. Adhesions of both pleuræ; left lung presenting the ordinary appearances of bronchitis; in the right lung between the middle and lower lobes, near to the spine, we found a large pouch, of the size of a hen's egg, filled with greenish-black, half fluid, half clotted matter, a mixture, apparently, of blood and of the detritus of the substance of the lungs—the gangrenous stench was quite intolerable. The walls of this cavity were of a brownish-black colour, and the surrounding tissue was hepatised, and all the bronchi in the neighbourhood were inflamed. The trachea, larynx, epiglottis, and part of the pharynx were covered with pseudo-membranous, or diptheritic laminæ, of a deep green and purple colour, and which were easily rubbed off.—*Journ. Heb.*

XXV. SUDDEN DEATH FROM PARALYSIS OF THE LUNGS.

The German authors attribute to this cause many of those instances of rapidly-fatal dyspnœa, which not unfrequently occurs during the course of other diseases, especially of phthisis. It is not uncommon for a medical man to leave his patient moderately comfortable, and apparently free from any immediate danger; and yet, in the course of a very few hours after, to be summoned to witness his death from complete strangulation. Dr. Shaeffer, of Ratisbon, first employed the appellation of pulmonary palsy to denote this affection; Storck called it catarrhus suffocativus, and Kerksig asthma paraliticus. It is common among infants, but still more so with old people. M. Lobstein regards many of the cases reported by Andral (who was at a loss how to explain their fatality) as instances of this disease. The following is an example.

A young man, aged 28, was admitted into the Strasburg Hospital with symptoms of general fever. Bleeding was ordered, and performed at 9 o'clock in the morning. At this time, there was no marked distress in the breathing; two hours afterwards intense dyspnœa came on, and this was accompanied with a strong mucous râle; the dyspnœa was speedily aggravated to orthopnœa; a severe pain and inward heat were felt along the entire length of the spine. The bleeding was repeated, with some relief to the symptoms, but the patient died soon after, quite asphyxiated. On dissection, no satisfactory morbid appearances were found.

Two other similar cases are reported; they occurred in phthisical patients. M. Louis, in his great work, "Recherches Anatomico-pathologiques sur la Phthisie," enquires—"how shall we explain so sudden a death, when there has been no apparent accident, nor any precursory nor concomitant phenomenon?" We answer that it is not necessary to discover indurations, hepatization, engouement, or ulcerations, upon dissection, but that we must remember that the lungs are vital organs, and that their vitality may become suddenly affected by paralysis.—*Archiv. General.*

XXVI. FATAL PURPURA HÆMORRHAGICA; PETECHIÆ IN THE BRAIN, HEART, LUNGS, &c.

This case occurred in a man aged 32. The constitutional symptoms were those of the most appalling prostration, and the hæmorrhages from the nose and bowels were most profuse, and could not be arrested.

On dissection, there were found numerous petechiæ dispersed over the medullary substance of the brain; each red point was surrounded with a circle of greyish matter. The pleuræ were spotted over with petechiæ; the lungs were generally œdematous, and here and there contained bloody deposits; the external surface of the heart presented numerous petechiæ; there was little blood in the cavities, and that was

thin and pale. The parenchyma of the liver was soft and pale; and in the centre of its substance was found an extravasation of blood—a sort of "foyer apoplectique."—*Ibid.*

XXVII. Double Vision with one Eye.

M. Prevost, the distinguished professor of Geneva, and Mr. Babbage, are annoyed with this irregularity of vision. Whenever they look at an object, without straining their eyes, they see two images, one situated above the other. In the case of the latter philosopher, the upper image is more faint and indistinct than the lower, or true one, and they are separated by an angle of 12 degrees. When his health is deranged, the upper or false image becomes more distinct, but the angle of separation is not changed. In consequence of the smallness of this angle, the image is not ordinarily seen quite double, but there is rather a confused border perceived round the real object; when he looks through any small aperture, the feeble image disappears, and the same effect is produced by inclining the head backwards, and directing the sight somewhat under the eyelid; also by contracting the eyebrows, or by using a concave lens.

The affected eye of M. Prevost sometimes sees three images of the same object, one above the other. He readily ascertained that the highest image corresponded with the most inferior picture on the retina, by moving slowly a screen before his eye, from above downwards; he thus observed that the inferior image disappeared before the other, and, as it faded, the upper one became more distinct. Sometimes he could hide the images by the eyelids—the upper image by the lower lid, and the lower image by the upper lid. M. Prevost was at first much annoyed by this double vision, for when he was reading, the "o" always seeming "8," &c. By using a convex lens, he found that, by using it at a certain distance from the eye, only one image was seen, but it was surrounded with a light shade; when the glass was withdrawn further, the two images returned, and the same took place when it was brought very near to the eye; but, in the latter case, the images were seen side by side, and not the one above the other. M. Prevost is of opinion that, in such cases of double vision as his own and that of Mr. Babbage, the crystalline lens is chiefly at fault, so that it becomes a double refractor; this condition may be induced by a fracture, bruise, a partial flattening of its surface, or by a separation of one of its layers. The effect of a fracture is readily witnessed in a glass lens; for, if broken, we at once perceive two images. Dr. Wollaston attributed to this cause his own defect of vision, and found that the error was for the time corrected, by looking through the refracting angle of a prism steadily at the object. It is not necessary that the lens be actually broken; one of its segments or laminæ may be somewhat displaced and irregularly inclined, and thereby the double refraction may be caused. In the memoirs of Dr. Holyoke, who died at the age of 100 at New Jersey, in 1829, it is stated that, for several years, all objects were quadrupled or quintupled; when he looked, for example, at the moon, he saw five moons.—*Annal. de Chemie.*

XXVIII. Medical Monomania.

When will physicians cease to localise every disease, and to insist upon charging a solitary ganglion, a few vascular points, or some trifling change, (often only an effect, an accident, an epi-phenomenon) with all the onus, and blame of causing many diseases which our fore-fathers, perhaps less subtle anatomists, but infinitely better logicians than we, denominated "general" or "morbi totius substantiæ"!

XXIX. Fissures and Depressions observed on the Bones of the Cranium of New-born Infants after Natural Labours.

The occasional occurrence of these

ought to be well remembered by medical jurists. Many medical men of great eminence, as Haller, Rose, &c. have committed the serious error of invariably attributing to extraneous violence, every appearance of crack or other injuries to the cranial bones of fœtuses. Rœderer and Baudeloque have the merit of first proving the fallacy of such an opinion; and the best obstetrical writers of the present day agree with them. A most satisfactory case is reported by Professor Siebold in his journal. The labour was tedious and painful, and the child was born dead. A large bloody swelling was found over the parietal bone; and on exposing the bone, three distinct fissures traversed it in different directions. No instruments had been used; nor had the body of the child suffered any injury after birth.

XXX. TOTAL MORTALITY IN FRANCE FROM CHOLERA.

It appears from an official report, that the total number (the military excepted) of those affected with cholera in France, from its first invasion at Calais, on the 15th March 1832, to the 1st of January 1833, is 230,000; and the number of deaths 95,000. The government expense is estimated at rather more than a million and a quarter of francs.

XXXI. M. PIORRY ON PNEUMONIA HYPOSTATICA.

By this term, the author means inflammation of the lungs induced and kept up by the "engouement pulmonaire," or distention of the vessels about the roots of the lungs, or any other part which lies lowest, in consequence of the subsidence or gravitation of the blood to that part. It is well known to anatomists, that the posterior parts of the lungs are almost always found on dissection to have a deep purple venous colour, while the fore parts of the lobes are pale and speckled. This appearance of congestion is correctly attributed to the subsidence of the blood after death, to the most depending parts, and constitutes the "engouement cadaverique" of the French pathologists. Now, M. Piorry is of opinion, that in enfeebled states of the system, especially in aged people, a tendency to the same subsidence may take place during life, when the patients are long confined to the horizontal posture, and may thus, if it does not actually prove an exciting cause, at least much aggravate any inflammatory affection of the lungs;—eight illustrative cases are adduced; they occurred in old people admitted into the La Salpetrière as objects of charity. Most of them had no serious disease, save old age, at first; but mere confinement to bed appeared to bring on an obstinate cough and other pectoral symptoms. Auscultation easily discovered the seat of the malady; the dullness on percussion, and the absence of the respiratory murmur, with the consecutive râles, heard on each side of the spine, shewed that it was the posterior parts of the lungs which were chiefly affected; and the post-mortem examination confirmed in every case the accuracy of the diagnosis.

Professor Boyer long ago remarked that it was most injudicious to confine old people for any great length of time to bed; and even when it is absolutely necessary, as in fractures, or other severe injuries, they should be told to sit up occasionally in bed, and thus prevent that congestion of blood, not only in the skin of the back, but also in the depending parts of the internal viscera.

M. Laennec had observed the frequency of pulmonary symptoms supervening in the course of malignant or typhoid enteritis; and added that "the pneumonias which occur in the course of malignant fevers are almost always latent, and that nothing is more common, especially in Winter, than this complication." Professor Fouquier used to attach great consequence to the examination of the thorax behind, in all typhoid enterites.

M. Piorry has observed that hypostatic pneumonias are not unfrequent in patients affected with dilatation of the heart, especially when there is contraction of any of the orifices, and in-

deed in all cases, where the circulation of the blood is in any way obstructed or embarrassed; for, under such circumstances, the gravity of the fluid is permitted to act more efficiently, and thus a tendency to engouement from subsidence, or hypostasis arises. Even in a state of perfect health, the horizontal posture will occasion a certain degree of this congestion; for it is found that on awaking from a long sleep, the back parts of the chest have less resonance on percussion, and give out a more imperfect respiratory murmur than at other times. Avenbrugger alludes to the dullness behind, in eruptive fevers, before depletory measures are employed. Piorry has noticed the same in many cases of fever and of angina; and the speedy removal of it, by bleeding and change of posture.—*Transact. Medic.*

The preceding views are sufficiently ingenious; but require further proof before we admit their entire accuracy. A simple and satisfactory test which the author has not employed, would be to place the bodies of his patients on their faces, immediately after death. The "engouement cadaverique" would be thus prevented, and the simple uncombined appearances from the supposed hypostatic pneumonia would be easily judged of.—*Ed.*

XXXII. Purulent Diathesis—Pericarditis.

There is, in some states of the constitution, so great a tendency to the secretion of pus, or as the French have called it, "travail pyogenique," in all inflammatory attacks, that we may with reason say that there is a purulent diathesis. It is of great consequence to be on our guard in the treatment of such cases; for they will not bear active depletion well; two or three good examples of pericarditis very rapidly terminating in sero-purulent effusion are adduced in illustration. The danger is the greater, because the local or characteristic symptoms of the pericarditis are sometimes exceedingly obscure and indecisive. In one case of a girl convalescent from scarlatina, and in whom œdema had supervened, there were no symptoms of distressed breathing or of disturbed circulation, till within 2½ hours before death. On dissection, upward of 6ozs. of reddish serum were found in the pericardium, and this membrane was lined copiously with lymph. A very interesting case of pericarditis with large effusion is mentioned, in which the symptoms of suffocation and dreadful anguish at the heart came on with periodic regularity at the interval of 24, 12, and 4 hours; these paroxysms being followed by perfect ease and tranquillity. Such cases have actually been mistaken for malignant agues. A memorable instance of this error was committed by Cabanis in the case of the famous Mirabeau. Rostan carries the idea too far, when he says that the paroxyms of all true asthmas are but the intermittent symptoms of diseased heart.—*Transact. Medicales.*

XXXIII. Anatomical Anomalies.

No 1. In an infant which lived fourteen days, and exhibited no signs of cyanosis, not only was the foramen ovale largely open, but the pulmonary artery, after having given off its branches to the lungs, curved round to the left side, and was continued down along the vertebral column in the place of the descending aorta, which was awanting. The aorta arose as usual from the left ventricle, and ascended towards the neck, where it bifurcated.

No. 2. The veins on the anterior walls of the abdomen were found enormously enlarged and varicose, forming on each side of the linea alba two immense pyramidal tumors. There existed probably some obstruction in the vena cava; and nature thus endeavoured to compensate, by enlarging the anastomosing veins between the iliac and femoral veins on the one hand of the vena portæ, and umbilical vein [which was not obliterated] on the other.—Lieutaud and Manec have reported similar cases of a magnified communication between the iliac and portal veins, and it is curious that this is the normal

arrangement of the vessels in many reptiles.—*Ibid.*

XXXIV. PLICA POLONICA.

M. Sedillot, who has lately returned from a sojourn in Poland, communicated to the Anatomical Society of Paris the personal observations he had made on this singular disease. One of the hairs taken from a plaited mesh was subjected to a microscope; by means of which a median canal gradually enlarging towards the free extremity of the hair was clearly seen. This canal was lined with a most delicate reticulated tissue, and in this tissue was contained the colouring matter; the bulb was distended and softened, and drops of matter could be squeezed from it. The disease commences in the bulbs, and propagates itself towards the loose ends of the hairs. After a time, the diseased secretion becomes less and less, and finally ceases, and the hair returns to its normal state.

XXXV. OPEN FORAMEN OVALE, WITHOUT CYANOSIS.

In a child of seven years, who had never had any symptoms of the blue disease, the inter-auricular septum presented at the site of the foramen ovale a network of fibres, between whose meshes the blood might freely pass.

XXXVI. PUS FOUND WITHIN FIBRINOUS CONCRETIONS OF THE HEART.

Two cases are adduced; one occurred in a syphilitic phthisical patient, the other in the body of an old woman, who was affected with asthma.

Tubercles were observed in the parenchyma of the heart in a patient who died of tubercular phthisis.

XXXVII. PHLEBITIS OF THE CAPILLARY VEINS.

M. Ribes has repeatedly observed this in scorbutic old people at the Hospital of Invalids. The inflamed minute veins form painful and tense subcutaneous networks. The larger veins are sometimes affected simultaneously, and sometimes not.

XXXVIII. INTESTINAL ENTOZOA.

There are four species, viz. ascaris lumbricoides, oxyurus, tricocephalus, and tænia; their mode of development is not well understood; they are either spontaneously engendered, or their germs are somehow or other admitted into the intestines, and there they grow and are unfolded. Their remote cause is probably always imperfect assimilation of the food. Each species is confined to a limited locality in the intestines. Whenever they are found in the air-passages, biliary or genito-urinary organs, we believe that they have escaped from the bowels.

The worms found occasionally in the cavity of the peritoneum also, and in fæcal abscesses, make their way from the bowels; but the perforations through which they pass are the result of previous ulceration, and are not caused by the animals. Such are the statements of Cruveilhier, a high authority in these matters.

XXXIX. LOSS OF MEMORY AND OF SIGHT AFTER A GUN-SHOT WOUND IN THE SUPRACILIARY REGION.

An officer of the 30th regiment was struck by a ball, which lodged in the right frontal sinus. Amaurosis, as is common enough, of the right eye, was the consequence, and almost total loss of the memory of events and objects. *Vide Lancette Française—Phrenologia quid dicis?*

XL. AMAUROSIS, FROM ONANISM IN A FEMALE.

A prostitute was admitted into the ophthalmic wards of the Hôtel Dieu, with great weakness of sight, amounting al-

most to amaurosis. She confessed that she was in the habit of polluting herself, and that she was immediately seized with complete blindness, whenever she addicted herself to the practice. It is stated that unfortunately such cases as the preceding are not very unfrequent among the young people of the seminaries and colleges in France!!—*Journ. Hebdom.*

XLI. Ossification of the Retina.

An example of this rare pathological phenomenon was found in the eye of an old woman who died lately at the La Salpetrière. The eye had been long atrophied. The retina, or rather the serous lamella, between the true retina and the choroid, had become the seat of an osseous deposit, which very much resembled in appearance the diploe in the cranium of birds, the cellular texture being very spongy and open. The vitreous humor had been greatly wasted.

M. Rognetta has detailed a case similar to the above; and it is worthy of remark, that ossification of the retina is not uncommon in horses, when their eyes have become atrophied from what farriers call periodic flux.

XLII. Aromatic Odour exhaled from the Fore-arm.

A man, aged 30, quite healthy, was surprised one evening after a day's active exercise, to perceive, when he undressed himself, a sweet strong-smelling odour, like that of Peruvian balsam, or the vapour of amber or of benzoin, from the inner surface of the left forearm, near to the wrist. He affirmed that he had not touched any of these articles nor any similar substances; but yet the smell was so powerful, that Dr. Speranza [who reports the case] was convinced that he had secreted some odorous matter about him. Friction and various lotions were used to counteract this curious symptom; but with no effect; indeed the rubbing, or any cause which heated the surface, seemed to encrease it. It did not come and go, but remained constantly at all times of the day;—and no other part of the body exhaled any particular odour. Not only Dr. S. but a number of other medical men examined this patient, and all were satisfied of the truth of the above statements, although none could give any satisfactory explanation. This very singular occurrence continued for two months; the patient fell sick of fever; and from the first appearance of the symptoms the odour ceased, and never returned, although the patient speedily regained his health.—*Annali Universali, Feb.* 1832.

XLIII. Chloride of Lime, as a Lotion, against the Itch.

Professor Fantonetti gives the result of nine trials. In seven of these cases the disease was cured in from six to eight days; in the 8th case the psorous eruption was removed, but was followed by an eczema, which gave way under the use of tepid baths; and he left the hospital well; the itch however re-appeared, and then yielded, only to sulphureous fumigations. In the 9th, the psora was cured—re-appeared—was cured again—returned a third time—and was finally subdued by the sulphureous fumigations. The chloride of lime lotion is made, by adding 1½ or 2 ounces of the chloride to a pint of water; it ought to be rubbed three or four times a day on the affected parts. A simple tepid bath is to be used every third day, in order to soften the skin, and clear it of any calcareous crusts. If the lotion is too irritating, its strength must be reduced. The disease is generally cured effectually in eight days.—*Ibid. Sept.*

XLIV. Fatal Effects of a Tartar-Emetic Plaister.

M. Bricheteau, physician of the hospital Necker, reports the case of a girl aged 20, for whom a plaister, the surface of which was sprinkled with half a drachm of tartar-emetic, was ordered to be applied to the epigastrium, where

several fresh leech-bites were at the time. In the course of two days a deep eschar was formed; the subjacent cellular tissue rapidly destroyed, and the recti muscles made bare; much febrile irritation was excited, aphthæ appeared in the mouth, and the parotids became immensely swelled; the patient died. On dissection, the whole of the cavity of the mouth was found studded with aphthæ; the inner surface of the small gut presented considerable redness and puffiness; and the ulcer in the epigastrium extended deep to the posterior surface of the recti muscles.

Observations. Blisters have frequently been known to cause painful and most troublesome œdema; and leech-bites have been followed by erysipelas and deep ulcerations. As a general remark, epispastics must be employed with caution, in weak, irritable, and lymphatic females.—*Archiv. Gen.*

XLV. DEATH FROM THE HÆMORRHAGE OF LEECH-BITES.

A young female had twelve leeches applied to the abdomen. The blood had continued to ooze all night, and on the next day she was found bloodless and exhausted, and, in spite of all the means used to revive her, sunk. On dissection, all the viscera, especially the heart and liver, were found remarkably pale. To ascertain the probable quantity of blood lost, M. Bricheteau applied a small wine-glass to a leech-bite, which at the time was bleeding moderately; in ten minutes he collected 3 drachms; —if the discharge continues, more than 2ozs. may therefore be lost in an hour, and 48ozs. or 3lbs. in 24 hours, from one leech-bite.—*Ibid.*

XLVI. KERMES MINERAL IN PNEUMONIA.

This preparation of antimony, the hydro-sulphuretum rubrum, may be advantageously substituted for the tartar-emetic. In one case reported by Bricheteau, six grains were given the first day, and copious purging was induced; the dose was gradually increased, so that on the fourth day the patient took 15 grains;—the "tolerance" was induced on the second day. The result was quite satisfactory.—*Ibid.*

XLVII. M. PIGEAUX ON THE CAUSE OF THE SOUNDS OF THE HEART, AND HIS REFUTATION OF MAJENDIE'S THEORY.

This is a very valuable paper, and will amply repay the study of all auscultators. We regret that we cannot afford room for a more extended analysis. M. P. says that he was first led to doubt the accuracy of Laennec's explanation on acoustic principles. He found that no contraction, however quick and energetic, of the hand when plunged in any liquid, ever produced any sound; but that if, on the contrary, he jerked a small jet of water against the walls of a metallic vessel, sounds, varying in intensity and timbre, and somewhat akin to those of the heart, were caused; again, when he tied the neck of a bladder filled with water to one of the orifices of the heart, and squeezed the bladder in jerks, he could still more closely imitate the normal sounds of the heart. He performed many experiments on frogs, lizards, and snakes, and satisfied himself that the succession of the systole and diastole, both of the auricles and of the ventricles, is uninterrupted, and therefore that there is no appreciable period of repose; that the ventricles only, and not the auricles, empty themselves completely during their systole; and that the contraction and dilatation of the auricles are performed less quickly than the corresponding action of the ventricles. Pathology taught him that the morbid sounds, viz. the bellows, saw, and rasp sounds, are caused by the vibrations of the valves, in consequence of the friction of the stream of blood, and that all the modifications of the clear sound are invariably associated with certain changes in the state of the large vessels.

The following propositions contain a summary of his opinions. 1. The cir-

culating fluid is the immediate cause of the sounds, which have hitherto been attributed to the contraction of the cavities of the heart. 2. The shock or friction of the blood against the parietes of the vessels which it permeates, occasions vibrations, which give rise to the sounds. 3. The intensity of the sounds is proportional to the force of this impulsion; the organization of the parts which enter into vibration determines the timbre or tone. 4. The contractions of the cavities of the heart are only the mediate cause of this phenomenon, which is also coincident with, but not occasioned by the dilatation of these cavities. 5. The movements of the heart, considered by themselves, are quite "aphonic;"—the fact of the interposed periods of silence between the different sounds is a proof of it. 6. When the blood enters the auricles, it dilates them without any murmur. 7. Driven into the ventricles, by the equally noiseless contraction of the auricles, the blood impinges upon the walls of a cavity, which, closed at its exit, enters into vibrations, and occasions the first or dull sound, or, as it ought rather to be called, the inferior sound. 8. The time of the first repose, or rather of the first silence, is the instant of the systole of the ventricles. 9. The second, clear, superior, or upper sound follows immediately, and is occasioned by the collision of the blood against the walls of the aorta and of the pulmonary artery. 10. The period of the second silence, or as it is called by Laennec, the period of the repose of the heart, is equal to the difference of the time which is occupied by the clear sound on the one hand, and by the dilatation and contraction which are aphonic of the auricles on the other.—[This last proposition is very obscure—Ed.]

The theory of M. Majendie is very different from the preceding; he maintains, in a memoir recently read before the College of France, that the two sounds of the heart are owing to the successive impulsions of the apex and of the base of the heart against the walls of the chest; that the diastole and dull sound are synchronous, and that the systole and clear sound are also synchronous; and that if fluid be artificially injected into the pleuræ, and thus prevent the shocks of the heart against the ribs, the sounds can be no longer heard. But this theory is at once proved to be insufficient and erroneous, by the fact that the sounds of the heart can be heard distinctly, after the sternum and ribs have been removed. Numerous experiments set this beyond doubt. Moreover, no explanation can be given of the morbid bruits or murmurs, on the above theory. In all our enquiries on the cause of the cardiac sounds, it is of great importance, says M. Pigeaux, to remember that the exact points of the maximum of intensity of each are separated, or apart about three inches from each other.—*Arch. Gener. Nov.*

XLVIII. Neuralgia.

A severe case of supra-orbital neuralgia is mentioned, in which quinine combined with acetate of morphia, very speedily and decidedly effected a cure. —*Journal Complementaire.*

XLIX. Intermittent Spasmodic Cough.

An instructive case is recorded by M. Bricheteau, in Nov. No. of the Journal Complementaire. The ordinary treatment, by leeches, blisters, emetics and so forth, had failed; and an injection composed of 10 grains of assafœtida, 3 grains of quinine, a yolk of an egg, and 6 ozs. of water, was given with the happiest effects.—*Ibid.*

L. Dupuytren's Mode of treating Prolapsus of the Rectum.

This eminent surgeon has cured a vast number of patients labouring under this disease by means of an operation which is both simple and speedily effectual. He seizes the folds around the anus with forceps whose blades are large and flat, and excises them with strong sharp scissors; this excision must be carried deep enough to remove not only the in-

teguments embraced by the forceps, but a portion of the rectum, when the relaxation of its mucous coat is very considerable; generally the depth of the wound need not exceed a few lines, but in other cases it must be at least an inch. Dupuytren usually cuts off in this manner four folds of the margin of the anus, one in front, one behind, and then one on each side; if the disease be not of great extent, the removal of one or two of the folds may be sufficient. This operation is seldom followed by any considerable hæmorrhage. It is necessary that the patient be so treated, that he has no occasion to have the bowels relieved for eight or nine days, in order that the wounds may not be disturbed. The cure is generally complete in a fortnight. Dupuytren has met with no case of failure hitherto.—*Ibid.*

LI. RESEARCHES ON THE CONIUM MACULATUM, BY PROFESSOR FODÉRÉ.

It has been frequently disputed, whether it was really this plant which the Athenians used for state poisoning, as in the case of Socrates. The description left us, in the dialogue of Plato with Echecrates, who was present during the last hours of the sage, is as follows:—after drinking the fatal cup, he kept walking about the room for some time, till he felt his limbs grow heavy; he then lay down on his back; the executioner went up to him and pinched his feet, asking him whether he was sensible of it. Socrates answered, "no." The numbness and loss of feeling extended up the legs and thighs, which became gradually stiffened and cold; the belly was soon similarly affected, and when the coldness reached the heart, life was immediately extinguished. Just before his death, he took off the cap from his head, and said to Crito—"We owe a cock to Esculapius, forget not to discharge the debt." Shortly after these words he was convulsed; his features became fixed, and the dismal scene was closed.

Now, no medical man could very satisfactorily assert, that the preceding description could lead him to ascribe the poisoning to the common hemlock; and M. Fodéré, till very lately, confessed that it must be considered as very uncertain, what was the herb which had been used. His recent experiments have however satisfied his mind that it was in truth the conium. The beautiful memoir of M. Geiger of Heidelberg, in 1832, has thrown much light upon our inquiries. He has found that the active principle, which he denominates cicutine, is an alkaloid, in itself volatile, but fixed in the plant by a peculiar acid; that it is of an oily consistence, has a sharp, very penetrating and offensive smell, resembling that of a noxious urine, is acrid to the taste, like tobacco, and is soluble in water, alcohol, and æther; that besides this principle there is another, equally volatile, having the ordinary smell of the plant, but which is perfectly innocuous; that the cicutine can be obtained only from the fresh plant; and that it becomes decomposed even in the extract prepared from the recent plant, after six weeks' keeping; that a third of a drop killed a pigeon, and that a dog, to which eight drops had been given, soon began to totter, then fell down, vomited, and died in about six minutes, after being violently convulsed.

Professor Fodéré has repeated M. Geiger's experiments, and has simplified considerably the process to obtain the active principle of the poison; he finds that it exists in the plant, as a subconiate of cicutine. We cannot afford space to give the particulars, and therefore recommend to such of our readers as are interested in pharmaceutical operations, to consult the paper itself in the 173d number of the Journal Complementaire des Sciences Medicales. He gave six grains of the cicutine to two strong rabbits—they soon began to totter, the pupils became dilated; they yawned and fell into a deep sleep; in about half an hour they awoke, and seemed to have recovered from the effects of the poison. These results prove that cicutine has sedative and narcotic qualities nearly equal in activity to those of morphine, but very inferior to those of strychnine, two grains

of which are sufficient to kill a rabbit very speedily, whereas ten and even 15 grains of acetate of morphine have been given, and stupor only was induced. To try the effects of a full dose of cicutine, Fodéré gave one rabbit twenty grains; the animal became immediately convulsed, seized with tetanus, and this was quickly followed by a general stiffness; the pupils were at first dilated and then contracted; death took place in the course of two minutes. Now by attending to these phenomena we can easily trace the analogy between them, and the circumstances of the death of Socrates. The numbness and stiffness, mentioned in Plato's dialogue, were doubtless the tetanic rigidity observed in the above experiments, and the stupefaction of all the senses and functions, the fixed look, and the convulsions, correspond in both cases; and if we were to regard the last injunction of the sage respecting the sacrifice to Esculapius, as the ravings of delirium, we should probably be right, especially as his condemnation was in fact awarded, for the very opposition he had always shewn to the superstitions of his country. If hemlock was indeed the poison employed, the dose must have been considerable; probably eight ozs. at least of the juice.

We shall only advert to one topic more: it has been already observed that the cicutine could be obtained from the fresh plant, but not from dried specimens, nor from old extracts. This shews the importance of preferring the recent herb on all occasions, when we wish to employ conium medicinally. So inert is the extract sometimes, that it has been given in the dose of an oz., without producing any very obvious effects; but as we cannot always have the fresh plant, it is an object of great consequence to contrive a plan by which a really active preparation may be had and preserved. Fodéré suggests that the method pursued by many of the German chemists is the best; namely, by preparing an extract by means of an hydraulic press; and he has already ascertained, that when so procured, it retains perfectly the peculiar smell of the fresh plant.—*Ibid.*

LII. Hydro-ferro-cyanate of Quinine in Intermittent Diseases.

Dr. Cerioli adverts to the frequency of the relapse of agues, after their apparent cure by the ordinary preparations of cinchona, and points out the necessity of attending to the existing visceral derangements during the course of treatment; for it is true that we may succeed in removing the periodic fever by means of bark alone; but to effect a permanent cure, remedies must be simultaneously directed against any pathological lesion of the liver, spleen, or any other viscus which may chance to be affected. Hence, in numerous cases, it is requisite to combine an antiphlogistic with an anti-periodic therapœia. Like most Italian physicians, Dr. C. regards the hydrocyanic acid as a powerful sedative of inflammatory action, and he was, therefore, led to expect beneficial effects from exhibiting it along with bark in many intermittent diseases. An extended experience has substantiated the correctness of his views, and proves the great utility of the practice in all agues which are kept up, or are increased by, visceral irritation.

He has published the results of 24 cases, in all of which the quinine alone had been used without effect. In 13 of these the type was quartan, and enlargement, or sub-acute inflammation of the spleen, existed; they were chiefly old and obstinate cases, of from a few months to one, three, and even eight years' standing. General and local bleedings, resolvents, and bark, had been freely administered. The hydro-ferro-cyanate of quinine was given, in the dose of two, three, four, and eight grains, made into pills, in the course of the day; sometimes it required still larger doses. In other cases, there was chronic hepatitis, general debility, anorexia, or gastric irritation. Repeated leechings, emollient enemata, mercury, a low diet, and tepid bathings, generally subdued these symptoms; but the ague still continued, in spite of the use of the quinine. To counteract a new congestion of the liver, or of the stomach, Dr. C. gave the hydro-ferro-cyanate

with complete success. He very properly inculcates the necessity of first subduing the local disease, before we can expect to cure the ague with bark in any form, and only asserts that, when the sulphate of quinine has failed (the extent to which it was carried is not mentioned), he has often succeeded with the new preparation. An interesting case of intermittent sciatica is reported, and also three cases of pulmonary irritation and hæmoptysis, attended with an aguish fever, in all of which the hydro-ferro-cyanate was most beneficially substituted for the sulphate.—*Annali Universali, July.*

LIII. EFFICACY OF IRON AGAINST CHLOROTIC GASTRALGIA.

MM. Bonnet and Trousseau have reported several interesting cases, in which severe and obstinate pains in the stomach, occurring in females affected with amenorrhœa, leucorrhœa, or similar uterine affections, have yielded to the judicious employment of subcarbonate of iron, after most other means of treatment have failed. As the first case is a good illustrative specimen of the author's views, we shall give an abridged statement of it.

A. B. aged 21. She had enjoyed almost uninterrupted good health till her sixteenth year, when the catamenia first appeared. Since that period, she has been sometimes regular, sometimes not so, and has suffered much from headaches and general indisposition. In the beginning of 1829, she first experienced symptoms of gastralgia; the pain she compared to a weight, and sometimes to a pinching—it was always worse after eating, especially animal food. At first it was not very severe, and came on only at intervals of several days; but gradually it became worse, and returned almost every day or two. A physician prescribed leeching of the epigastrium and demulcent drinks—flesh, fruits, and vegetables were permitted, but wine and coffee interdicted. The distress was relieved for some time under this treatment, but, in the course of a month or so, it returned with aggravated violence; at last she suffered so much after every repast, and even after a single spoonful of food, that she almost starved herself. The physician considered that there was chronic gastritis, and even suspected cancer of the pylorus. The patient was exceedingly wasted, but retained her wonted cheerfulness. MM. Bonnet and Trousseau were consulted at this period; they enquired what description of food seemed to cause least pain; she told them boiled or stewed fruits, prunes, &c. but that all such articles had been inhibited by her medical attendant. She was now permitted to take them, and the following pills ordered: take of carbonate of iron, extract of succory, equal parts, and divide into pills of six grains each; the dose was at first only one night and morning, and gradually increased to eight or ten at a time. In 20 days she was almost completely cured. The iron was continued for two or three months.—*Archiv. Gener.*

LIV. SINGULAR CONVULSIVE DISEASE.

A young man, aged 22, consulted, in May, 1825, M. Husson, physician of the Hôtel Dieu, for a very extraordinary convulsive disease, which had afflicted him for several years. M. H. called in the evening upon him, and found him apparently quite well, and enjoying the conversation of a friend; on a sudden, he began to move about in his chair, struck his right thigh forcibly with his right hand, which he then immediately placed on his left shoulder; then, with his left hand, he struck his left thigh, and placed it on his right shoulder—the two arms thus crossing each other on the chest. There were thus four slaps, following with admirable regularity, first on the right thigh, next on the left, then on the left shoulder, and, lastly, on the right one; and so quickly were they done, that it was difficult to follow them with the eye; in about 2½ minutes those movements abated and ceased for a second or two; then, after a very deep inspiration, they returned for about a minute and a half, and again ceased; but, after another deep inspiration, the movements were

repeated a third time, but did not continue so long; the paroxysm altogether lasted for about five minutes; the patient then rose from his chair, walked briskly about the room, stretched out his arms as if to unstiffen them, and resumed his former health. The paroxysm, it will be observed, consisted of three distinct attacks, separated by short intervals, and becoming less severe each time. During the continuance of it, the patient felt slight vertigo, but did not lose his consciousness; he could hear noises, but he could not answer any question, and afterwards he had only a confused recollection of what he had seen or heard during the fit; his features were fixed, but not convulsed. These fits had repeatedly seized him in public places, and then he was considered either as an idiot or impostor. In 1823, when he was seventeen years old, he had laboured under typhus fever, and had been delirious for nine days. It was while recovering from this fever that the first appearance of the convulsive disease was noticed; but at that time it assumed a different type, and much resembled a fit of epilepsy, as the patient was quite insensible, and foamed at the mouth. After a lapse of four months, it took on its present very extraordinary character. At first, there were three paroxysms in 24 hours—then a fourth was added, in consequence, it seemed, of mental anxiety and grief; and, for 2½ months, there were four paroxysms regularly every day, namely, when the patient rose from bed—at 10 o'clock—at noon—and, lastly, at the exact time of sunset. The 10 o'clock paroxysm ceased spontaneously, and the noon one after a long journey which the patient made a-foot; so that, when M. Husson was consulted, there was only a morning and evening attack; and, what was very singular, these attacks came on precisely when the patient got out of bed and when the sun set, following the variations of the time. Another very curious feature is, that the number of slaps or thumps which he gave himself was always the same, in the corresponding paroxysm: in the morning one, 110 were given to each thigh, without any interruption—in the evening one, which, as we have seen, was composed of three attacks, 110 were given in the first, 60 to 65 in the second, and 30 to 35 in the third one. These minutiæ may seem trifling to some, and may, perhaps, not be readily believed; but it is right to state, that not only M. Husson, but also MM. Esquirol, Villermé, and the late M. Dance, repeatedly have authenticated the preceding details. Generally, before each paroxysm, the patient perceived a sort of "aura," which he compared to a shaking, from the point of the toes upwards to the shoulders, but not higher; whenever he felt this sensation, he immediately sat or lay down, else he fell to the ground. Depletion, baths, antispasmodics, narcotics, tonics, &c. had quite failed to relieve him. In spite of all the efforts of the Parisian physicians, the disease remained untouched, and the patient returned home.

Remarks. Professor Frank has reported the case of an epileptic girl, in whom the fits returned regularly with every new quarter of the moon: "Et quidem tam exacto calculo, ut ipso momento quadræ lunaris, et inscia sæpe penitus hujus mutationis in cœlo, rhythmum lunarem in suis paroxysmis explicaret."—*Archiv. Gener. Sept.*

LV. Indian Ophthalmia, treated with much success by Alum.

M. Sonty, in a report which he lately made to the Minister of the French Marine, mentions his great success in the treatment of a most violent and rapidly-destructive epidemic, purulent ophthalmia, in the East Indies. At first he had employed antiphlogistic measures, but they entirely failed, or rather the disease was too intense to be quickly enough affected by them. The natives employed very stimulating applications; as, for example, a mixture of pepper, lemon-juice, and the juice of tamarind leaves, to which is added afterwards roasted gall-nuts; this paste they applied round the eyelids. M. Sonty soon found out the marvellously

good effects of rock alum. He took a piece, with which he kept stirring, for eight or ten minutes, the white of an egg, which is then to be put into a fine muslin bag. When this is to be used, the patient's head must be held back, and, while the eyelids are kept open, a few drops of the liquid are to be squeezed from the bag upon the eye; this operation must be repeated very frequently—in some cases every half-hour. The same treatment is applicable in all the stages of the disease, and generally cures it in from 24 to 48 hours.—*Archiv. Gener.*

LVI. M. CLOT BEY, ON THE CHOLERA IN EGYPT.

There is a very interesting and instructive paper by M. Clot in the September No. of Broussais' *Annales de la Medecine Physiologique;* and such of our readers as are anxious to become acquainted with the history and travels of this pestilence, will do well to study it. We can afford only a very short space for a few of its most important details. In June of 1831, it was first announced at Cairo that cholera had broken out at Mecca; and by the 15th of the following August it had spread to Cairo itself. The terror and desolation which speedily followed were in truth awful. The mortality exceeded that of the most fatal epidemics, and threatened utterly to sweep away the population of Cairo. The disease was so intensely violent, and the "nullity" of the treatment so complete, that scarce one recovered from the attack. At almost every step we saw some of the wretched victims suddenly arrested by the pestilence, fall to the ground as by the breath of a destroying angel, and expire after one or two hours' sufferings; there was no hospital but one, and that was for the military exclusively; and as for homes they had none. Lying in the streets, they died unassisted; even a drink of water to assuage their intolerable thirst was seldom to be had. The Moslem resignation, which had never been shaken by the most frightful pestilences, gave way for the first time; and the Turks, following the example of their Pachas, fled from the place. The symptoms, as detailed by M. Clot, are quite the same as we have seen in aggravated cases at home; but in Egypt, as here, there were various shades and degrees of virulence, and few or none escaped it altogether. In the more favourable cases there was only loss of appetite, nausea, slight vomiting and purging.

M. Clot is a decided Broussais-ist in treatment: if called sufficiently early he bled, ordered warm drinks, sinapisms, frictions, and administered opium freely. If there was much pain at the epigastrium, he applied leeches or the cupping-glasses. In some cases he repeated the venesection a second and even a third time. If the patient was already in the cold stage, bleeding was useless, and indeed impracticable, for the blood would not flow; the indication was to restore the cutaneous circulation, and for this purpose sinapisms, rubbing, warm clothing, and drinks, to which was added some narcotic, were prescribed. If the heat returned to the skin, venesection was immediately performed. In general, the antiphlogistic treatment, pursued actively from the commencement, was the only one whose efficacy, comparatively, was constant. M. Clot has saved many, he thinks, by it from the very worst state; and so satisfied were the people of its superior safety, that they practised it on themselves, on the first appearance of the symptoms. A lieut.-colonel of a regiment, whose surgeon had disgracefully fled, saved almost all the soldiers attacked, by bleeding them himself. During the prevalence of the scourge the sky was gloomy, ominous, and obscured by a grey veil; the sun gave a pale and sickly light, which became of a green hue towards sun-set; and this was followed by a long twilight, whose reddish glare lasted for several hours.

On the interesting topic, of the mode of the propagation of the disease, M. Clot comes to the conclusion, that it is not by contagion, but through the medium of the atmosphere. His reasons are so just and forcible that they de-

serve to be recorded. 1. The disease broke out at nearly the same time over the whole of Egypt; and therefore appeared in many places which had no communication with Haggiaz, where the first case was seen. 2. The Harams, watched with the most strict quarantine, were not exempt. 3. The sailors in many of the ships in the roadstead of Alexandria were seized, although no communication had taken place with the shore. The Vice-roy of Egypt had embarked on board a vessel on the first outbreak of the disease; but as several of his retinue successively died, he had to change the vessel several times. 4. Five hundred Bedouins, encamped in the desert, many miles from Abouzabel, and separated by a most strict quarantine, did not escape. 5. Some villages remained altogether free, although there was a constant communication between them and infected places. 6. There was great inequality in the mortality of different places, under nearly similar circumstances. 7. Very few of the servants of the hospitals were seized. 8. The bazaars, which had been closed at first, were re-opened, when the disease had nearly subsided, for the sale of the clothes and other effects of those who had died; and although no precautions were used, the disease did not re-appear. 9. The frightful rapidity with which the disease reached its acmé of destructiveness. Can we suppose that a disease, if merely contagious, should have, in the course of four or five days, acquired its summum of intensity; and after lasting for scarcely a month, should as quickly subside? 10. The almost universal dissemination of the disease in some of its forms, from the living death of the malignant, to the slight purging in the mild cases. M. Clot, although a decided anti-contagionist, admits that cholera, like other epidemics, may, under certain circumstances, acquire a contagious character.—*Annales de la Medecine.*

LVII. On Cyanosis.

We employ the word in its original and comprehensive acceptation, to denote that morbid state in which the skin and mucous membranes acquire a blue or purplish hue.

M. Gintrac published a memoir on this subject in 1814; Professor Frank, of Wilna, has devoted a chapter of his "Praxeos Medicæ Universæ præcepta" to consider the "morbus cæruleus;" and, lastly, Jourdan has written an able article on "Cyanodermie" in the Dictionnaire Agrégé des Sciences Médicales. Frank's definition is—"lividity of the skin, especially of the lips, hands, and feet; coldness of the extremities, irregular movements of the heart, dyspnœa, returning at intervals, weakness of the muscles, and tendency to hæmorrhages from different parts." He divides cyanosis into the congenital and the acquired forms. In the former, the new-born infant presents, after a general paleness of the skin, a livid, leaden, or a reddish hue of the surface, and this hue may alternately fade and re-appear for some time. The lividity is always increased during the act of sucking, or when the child cries, coughs, or is kept upright. The dyspnœa and cough are sometimes constant—at other times intermittent; the paroxysms are usually accompanied with convulsions, and after these the little one lies almost inanimate. During this time, although the heart beats violently, the pulse is frequent, but regular, and the other functions are normally performed.

In the acquired form of cyanosis, the lividity is first noticed in the nails, points of the fingers and toes, and in the lips; the dyspnœa recurs at intervals, and is broken with sighing and groans—the action of the heart and arteries is violent and irregular, and sometimes the jugular veins are enormously distended. After these paroxysms, the breathing becomes easy, but the patient complains of a continual coldness, and yet this is, perhaps, not appreciable by another person, nor by the thermometer. If dentition and puberty are but slowly developed, the body grows rather quickly, the arms are long, the last joints of the fingers are puffed and swollen, rough and warty, the nails curved inwards; the face is slightly

swelled, the eyes are prominent and yellowish, the gums spongy, the breath offensive, the tongue is unusually large and irregular, and the patient is often yawning—sometimes the skin is very tender in particular parts; the sleep is generally disturbed by fearful dreams, yet the patient's powers are not dull, nor enervated; the appetite may be good, but the patient's distress is always aggravated during digestion, and also by moral emotion, by cold, and any catarrhal ailment. There is a great tendency to bleedings from the nose, gums and lungs. As the patient becomes older, he is annoyed with headache, vertigo, dimness of vision, a sense of anxiety and pain in the chest, nausea, and general debility; the bowels are constipated, and the urine occasionally thick and fetid. There is generally a paroxysm every morning and evening, and it lasts from a quarter to half an hour; when it is coming on, the patient lays himself upon his belly, and compresses his chest with both his hands. If he does not die suffocated in one of these fits, dropsy, hemiplegia, or hemoptysis, very frequently brings on the fatal issue.

Frank considers hereditary tendency, the male sex, and perhaps, also, any fright of the mother during gestation, among the causes which predispose to cyanosis.

If the disease be not congenital, it may first appear at very different periods of life—sometimes in a few days after birth, or in the second week—in the first, second, or sixth month—towards the end of the first, or during the second, third, fourth, fifth, twenty-first, or twenty-third year, and at other times not till the fifty-seventh year. The exciting causes are usually dentition, the milk of an unhealthy woman, hooping-cough, variola, catarrh, amenorrhœa, blows on the chest, falls from any height, quick running, mental emotions, and cutting the hair in plica polonica. The proximate cause is either the mixing of the venous with the arterial blood, in consequence of some malformation of the heart and great vessels, or some impediment to the change of the venous into arterialized blood, as from the obliteration of the pulmonary artery, or from its being given off by the left and the aorta by the right ventricle, or from some obstruction to the action of the lungs, or, lastly, from an affection of the brain and spinal marrow. It is very common to find, on dissection, several of these morbid states conjointly; thus, narrowing of the pulmonary artery is often associated with, if it is not the direct cause of, the foramen ovale being open, or with a communication between the two ventricles. Our readers will now understand why Frank divides the disease into the cardiac, pulmonary, and the encephalic cyanosis. When the primitive seat has been in the lungs, preventing or impeding their action, it is called by him pulmonary; but in this form some morbid change either of the heart, or of the large vessels is very speedily induced; thus Lentin found enlargement of the heart, contraction of the great pulmonary vessels, and tuberculous hardening of the lungs together. Trotter found enlargement of the right auricle, and hydatids in the right ventricle with copious effusion in the chest and head. Heischman, in one case of cyanosis, found contraction of the tube of the trachea, and also of the glottis; and Kwiatowski mentions another, in which the only morbid appearance on dissection was hepatization of a large portion of the lungs. Still, as a general remark, we should say that not only are the lungs very frequently found dreadfully disorganized, and yet no symptoms of cyanosis are present, but, also, that their structure is often little or not at all diseased, in many cases of fatal cyanosis; and we are, therefore, inclined not to admit Frank's pulmonary species, regarding most of the cases which he adduces as rather belonging to the cardiac species, or that which is primarily connected with some malformation or disease of the heart. With regard to the encephalic form, we are bound in truth to recognize it; for numerous cases of well-marked cyanosis are on record, in which the heart, large vessels, and lungs, were found perfectly healthy, and the only morbid appearances existed within the head, or spinal

canal. Such cases occasionally are met with, when the catamenia have been suddenly suppressed—in one instance which is mentioned nothing irregular was discovered, except a general contraction of the arterial system, and a very marked fulness or enlargement of the viscus over the whole body. A blue colour of the skin is, as is well known, induced by the internal use of the nitras argenti, and by certain poisons; it exists also in the cold stage of agues and of other fevers, and especially in cholera. Professor Broussais, in his history of the Phlegmasiæ, published in 1808, particularly alludes to the blue colour of the skin in some severe abdominal inflammations, and in his memoir on Cholera, recently published, he attributes the cyanosis of the surface to the stagnation of the blood induced by the propelling forces of the heart being much impaired, or even totally arrested; and the cause, according to him, of the moving power of the circulation being so much affected is a general inflammation of the gastro-intestinal mucous surface, and not any affection of the nervous system, nor any direct paralysis of the heart's action, nor any miasmatic or poisonous infection, nor yet any spontaneous and accidental alteration of the blood itself, for all these are consecutive and not primary phenomena in the disease. We are therefore to consider the arrest of the circulating and respiratory functions as subsequent to and dependent upon the violent affection of the bowels and also of the cerebro-spinal system; and that indeed any morbid condition of the intestinal canal, or of the uterus, or of the encephalon, may be attended with cyanosis, when any disturbance of the breathing or of the movement of the blood is induced. If we follow Frank's classification, such cases of the disease must be referred to his second species, viz. that which arises from some obstacle existing to the change of the venous into arterialized blood; but we ought to add to the number of his species, and admit at least other two; we shall thereby have the cardiac, pulmonary, encephalic, or cerebro-spinal, gastro-enteritic, and the uterine cyanosis, according as the primary seat of the disease is in the heart, lungs, nervous system, stomach and bowels, or in the womb.

It is an interesting fact, that many cases of cyanosis owe their origin to some disturbance of the menstrual function, especially to sudden suppression of the discharge.

Cyanosis, whether it be congenital or acquired, is very rarely cured. If the infant survive the first few days or weeks, it very frequently lives on to puberty; but an aggravation of the symptoms every now and then takes place, especially when any change is going on in the system, as at weaning, during dentition, or when the child begins to walk; so also at puberty; if this epoch be passed, the patient may live to 18, 20, 31, 40, 60, or even 80 years of age. The chances depend considerably on the nature of the organic disease, and of the accessory morbid states; thus, in a child whose pulmonary artery was found to be completely obstructed, death took place on the 13th day from its birth; whereas out of three patients in whom the foramen ovale and ductus arteriosus were simultaneously patescent, one lived 17 years, another 29 years, and the last 42 years. Male children have been observed to die more quickly than female ones; and the mortality is certainly greater in Winter than in Summer. It is quite unnecessary to allude to the treament of cyanosis; if the physiology of the disease be understood, it is easy to adapt our palliatives to the most urgent distress.—*Journ. Hebdom.* No. 113.

LVIII. Cases of Pleuro-Pneumonia, with the Auscultatory signs in each, treated by large Bleedings.

Case 1. *Pleuro-pneumonia of the Right Side, in the second stage—great prostration.*

F. G. 58. When he was brought to the Hôpital de la Charité, so great was his exhaustion that he might have been

supposed to be affected with malignant typhus, had not the sputa, which are so characteristic of acute inflammation of the lungs, and the signs obtained by exploring the chest, removed all uncertainty from our minds. The sputa were viscid, transparent, and of a rusty colour. Percussion over the fossa supra-spinata gave out a dull sound; and at that part no respiratory murmur could be heard; but along the base of the scapula and between its inferior angle and the spine, a bronchial, or blowing respiration, and a strong resonance of the voice, amounting almost to œgophony, were perceptible. Lower down, a crepitant râle of small bubbles was heard, and the sound was somewhat obscure. He had been bled the day before, and the blood was sizy. Ordered to be bled freely, and have 12 leeches to the chest. Next day (22d) the blood was found to be buffy and cupped; the patient felt relieved; auscultatory symptoms the same; pulse 110; respirations from 32 to 36. To be again largely bled, and the chest, when it is painful, to be cupped. On the 24th all the symptoms were much abated; and in spite of the active depletions, the patient felt stronger; the same dulness on percussion remaining; the resonance of the voice no longer accompanied with the œgophonic shrillness; bronchial respiration as before; crepitant râle heard very distinctly over the fossa infra-spinata, and under the inferior angle of the scapula; pulse 92; respirations 28. On the 26th percussion yielded a sound less dull; bronchial respiration and bronchophony remaining. The patient was now convalescent; but, although the returning crepitating râle, "rhonchus crepitans redux," extended itself considerably, the dull sound on percussion, and the bronchial breathing continued; in a few days he left the hospital well.

CASE 2. *Pleuro-Pneumonia of the Left Side, in the second stage.*

P. L., aged 30, entered the Hôpital de la Charité on the 21st of September. He had pyrexia, pain in the chest, cough, dyspnœa, and expectoration of transparent, glairy, and rust-coloured sputa. She was largely bled; and on the following day the report is, that the symptoms are still very urgent; breathing very hurried and laborious, 48 to 52 times in the minute, and at each act of inspiration the alæ nasi are violently lifted up; the cough is painful and frequent; the sputa rusty, gummy, and flowing out when the vessel is inclined, "en nappe." On percussion, the chest sounds well in front, but behind, on the left side, there is dulness over the whole of the fossa infra-spinata, and then no respiratory murmur is to be heard, but a bronchial blowing, or "souffle," and a jerking resonance of the voice. The prognosis was not favourable, as the disease had extended very rapidly in a short time, and the patient had suffered from dyspnœa for the preceding five years, in consequence of a neglected pneumonic attack. Ordered to be freely bled and leeched.

On the 23d she was much relieved; the breathing easier and not more frequent than 36 or 40 times in the minute; the sputa less streaked and coloured with blood. The exploration of the chest gave the same signs as yesterday. Venesection to be repeated, and blood to be drawn also by cupping over the fossa infra-spinata. On the 24th, respirations only 28 to 32 in the minute; sputa thin, mucous, and transparent; the bronchial souffle, bronchophony, and œgophony well marked. On the 25th the ear began to hear the "râle de retour" at several points. On the 26th patient not so well; the crepitating râle heard yesterday, no longer appreciable; the breathing and the pulse increased in frequency. Ordered to be bled. On the following day, the crepitating râle returned, and gradually, but slowly, the respiratory murmur was to be heard the resonance of the voice also was heard faintly on the 4th or 5th of October; but the sound on percussion still remained very dull.

CASE 3. *Pleuro-pneumonia of the Left Side, in the second stage, accompanied with Typhoid Symptoms.*

P. B., aged 27, of a feeble and unhealthy constitution, was admitted into

the hospital on the 28th of September, with all the symptoms of inflammation of the lungs—the breathing 40 times in the minute—sputa frothy, transparent, and very rusty. Dulness on percussion over the fossa infra-spinata. Vesicular respiration superseded by a bronchial blowing;—voice also broncho and œgo-phonic, especially along the base of the scapula. To be largely bled. On the following day slight crepitating râle at the lower angle of the scapula, and this was more distinct on the 30th. The patient was bled on both days. On the 1st October a strong crepitating râle was heard over the supra-spinous fossa, and over the lower third of the infra-spinous fossa. The bronchial respiration and voice still distinct along the base of the scapula; sound on percussion dull; sputa viscid and rusty. Venesection and leeches to be repeated.

2d. The pulmonic symptoms aggravated, and the patient lay on his back in a state of great depression. To be cupped and blistered. 3d. Breathing very laborious, 44, and accompanied with violent action of the nostrils.—Cough frequent; sputa frothy but not rusty. Bronchial respiration below the left clavicle. To be bled to three cups. The clot small, and slightly buffed. He was relieved; and on the 5th, a crepitating râle was heard over all the extent of the supra, and infra spinous fossæ. On the 6th the respiratory murmur began to be blended with the crepitating râle; and this latter sign was appreciable in the left axilla; and the sound on percussion was more sonorous.—From this date the symptoms continued to abate, and the breathing gradually resumed its normal characters.

N.B. The preceding cases are from the Clinique of M. Bouillaud, who is a strenuous advocate of Broussais' doctrines, and is one of the able editors of the—*Journ. Hebdom. No.* 113.

LIX. On the Qualifications of a Physician.

That man is a scientifically informed physician who is well acquainted with, and has, as it were, appropriated to his own use, the results of all the enquiries made at different times by distinguished observers upon the symptoms, course and causes of diseases, and with the precepts of treatment which they have recommended and employed. To become a skilful practitioner, he must understand how to bring this knowledge into operation, and be ready in applying all its rules and deductions to each particular case. This most important talent can only be acquired by extensive researches and by diligent study at the bedsides of patients. Cicero has well said, "Nec medici, nec imperatores, nec oratores, quamvis artis præcepta perceperint, quidquam magnæ laudis dignum sine usu, et exercitatione consequi possunt." The most important attribute in the character of a physician, and indeed of every man who is engaged in the active and practical employment of life, is, after the acquisition of sound theoretical knowledge, the power or faculty of distinctly and correctly perceiving the leading phenomena of the case before him, of tracing the relations of causes and their effects, of reasoning upon them, and of applying the deductions to the remedial treatment. There are many physicians who are excellent theorisers, but who never become skilful practitioners; for with all their accumulated information, they know not how to recognize the individualities of a case, nor to reduce the symptoms to any general rule;—such are all merely book-men, who have acquired no skill in the sick room. On the other hand, there are physicians, and their number is very large, who style themselves sober and useful practitioners, and who treat all cases, after the analogy of previous ones, and the results of their experience in general, and employ, without being able to give any why or wherefore for so doing, certain remedies which they may have used on some former occasion with advantage. Such are the sheer empirics, the routinemen, the despisers of all theory, and the searchers after and triers of every new remedy proposed, by those at least of the same school. Now, although it may appear at first sight to be the

easier method of treating diseases upon the analogy of former experience, in reality it is not so; because every new case has something specific and individual in its character; and to arrive at a successful therapeia, the physician ought to attend to the peculiarities which result from the differences of age, sex, constitution, mode of life, employment, and so forth, and to vary and modify his treatment accordingly. This is the business of sound theorizing, and if so, then "to practise without theorising is, in other words, to practise without reflection." There are several reasons which have led many practical men to reject all theory.—With many, the cause exists in themselves;—they are bad reasoners, and in their attempts to discover and to apply the precepts of sound logic to any case, they fall into errors, from the dulness of their perceptions, or from the poverty of their thoughts;—they therefore blame the system; and seldom think of their own incapacities and deficiencies. With others, the distaste arises from their observing the idle dreams and phantasies of enthusiasts, who assume the title of theoretical men, style the vagaries of their brains lofty philosophical speculations, and who have at different times attempted, and not unfrequently too have succeeded, in introducing a system of physic into the schools. But as soon as physicians have learnt to refuse all credence to mere fanciful notions, springing up from darkness, and as soon as they arm themselves with scepticism against such nonsense, by weighing it in the balance of sound reason, and rejecting it as the offspring of an unbridled imagination, then shall the vain strivings of all enthusiasts become more rare and ineffectual, and a wholesome and sound system of theory be no longer despised.

May the hope which Bacon expressed two centuries ago be soon realized—"Speramus et cupimus futurum ut medici nobiliores animos non nihil erigant neque toti sint in curarum sordibus."—*Tiedemann Physiologie des Menschen.*

LX. CASES OF REMARKABLE CURES, BY THE LATE M. DANCE.

CASE 1. *Hypertrophy of the left ventricle, with consecutive engorgement of the liver, ascites, and anasarca.—Antiphlogistic and depleting treatment.*

A. B., aged 18, of a sanguine temperament, was admitted into the Hôtel Dieu under M. Recamier. For 18 months previously he had suffered from violent palpitations, sense of suffocation, which was dreadfully increased by motion, and especially when mounting up stairs. There was general anasarca, except of the face and upper extremities; the face was puffy, the cheeks of a deep red, and the lips of a purplish hue—fluid felt distinctly in the abdomen—liver so much enlarged that it might be traced as far as the umbilicus—dyspnœa, amounting sometimes to orthopnœa—a loud sonorous râle over all the chest; pulse equal and regular, but very small contrasted with the violence of the heart's action, which were so strong as fairly to push off the hand of the auscultator. The patient was bled largely from the arm, and fifteen leeches applied to the precordial region. The leeching was repeated for four days successively; and on the fifth day, a large and deep caustic issue was formed over the region of the heart; it admitted five peas. The patient rapidly improved, and in the course of six weeks was so well, as to be almost able to leave the hospital. The issue was kept open for two or three months longer, and no return of the disease has taken place to the present time; a period of three years.

Observations. The preceding case is an excellent example of the good effects of active local depletion and derivation.

CASE 2. *Complete paraplegia, occurring without evident cause, cured by two moxas in the neck.*

A. B., aged 21, of a healthy constitution, had been seized with general weariness and feverish distress fifteen days before his admission. A few pustules had appeared on the body, but these were gone, and now the lower limbs had fallen into a state of perfect

paralysis, which had mounted gradually higher, and affected nearly the whole of the body. The palsy had commenced in the right limb, before extending to the left one;—it involved the loss of feeling, as well as of motion;—there was no pain, or stiffness, or any twitching of the muscles. The skin of the abdomen also was completely insensible; the bladder was unable to expel the urine; the bowels were obstinately costive; respiration was performed chiefly by the movements of the diaphragm, the ribs remaining almost motionless; mental faculties and speech unimpaired. Symptoms of paralysis threatened to invade the upper extremities, which were feeble, and could not be easily raised to the head. Pulse small and weak. No cause could be assigned for this malady; the patient had not suffered from any injury or blow, and the spine did not present any irregularity, nor any tenderness when pressed. Sulphureous baths, calomel, and purgative injections were given daily for some time, but with no good; the breathing became more distressed, so as almost to threaten suffocation sometimes; and eschars began to be formed on the parts of the body on which the patient lay. Two moxas were now applied over the spine below the nucha. In eight days the sensibility had returned somewhat, and the incontinence of urine was not so complete. A fortnight afterwards, the palsied parts had recovered their natural sensibility, and began to exhibit some muscular movements; the urine could be retained during the day, and was discharged involuntarily only during sleep. In another week, he was able to bend and extend his limbs; but could not rise from bed, nor keep himself erect. The case went on most satisfactorily, and the patient was discharged quite well seven weeks after his admission.

Case 3. *Chronic inflammation of the neck of the uterus, and tendency to disorganization, cured by mild treatment continued steadily for three years.*

M. S., aged 34, delicate and nervous; mother of five children. Had miscarried some time before, during the sixth month of pregnancy; the placenta had been retained for several hours, and much hæmorrhage had taken place before it came away. Ever since, she had suffered from a constant uneasiness in the hypogastrium, increased by exercise, or before each flow of the catamenia; and she had also a troublesome leucorrhœa. These symptoms continued for a twelvemonth, and then became aggravated; she applied to M. Dance in September 1828; her condition was as follows. A sense of heat, weight and dull pain in the hypogastrium and about the seat, extending to the groins, and much increased on any motion; she was confined almost constantly to bed; when she attempted to walk, she was obliged to bend her body forwards, and advance only step by step; a thick, yellowish, and viscid discharge from the vagina. Her distress was much encreased before each appearance of the catamenia. Examination with the speculum confirmed the presumptive diagnosis of chronic inflammation of the neck of the womb, with numerous tubercular irregularities and tendency to organic changes. The *treatment* consisted in repeated applications of a dozen leeches to the upper and inner parts of the thighs—subsequently two large caustic issues were established in the loins, and these were kept open for the space of three years, during which time the disease existed. Emollient poultices to the hypogastrium, hip-baths and mild injections were also employed. The patient was kept in the horizontal posture for the first year, and quite apart from her husband. In the second and third years she was permitted to go into the country during the fine season, but was enjoined not to omit any part of the remedial measures. Her diet consisted exclusively of milk, farinaceous food, eggs, and vegetables. The symptoms were very little alleviated for the first 12 months, and had not the patient been endowed with astonishing firmness and constant hope, her medical attendants would have left her, with the persuasion that the disease must inevitably become worse and worse. Fortunately they did not; for the second year brought most agree-

able changes; by the end of it she was able to rise, walk about, and to enjoy her food. The cure went on progressively, and she was restored to almost perfect health after four years' suffering. The neck of the womb and os tincæ were still, however, carunculated, but not painful on pressure.

The preceding case suggests some very useful and important hints to medical men, that, in certain complaints, they ought not to allow themselves to become impatient from want of success at first; but that, after they have made a correct diagnosis, and laid down a suitable plan of treatment, they should persevere undeviatingly, and without being discouraged.—*Archiv. Gener. Nov.*

III.

Institute of France.

I. ACADEMY OF SCIENCES.

Séance of January 28th.

M. DUTROCHET read a most interesting paper, on the "Mechanism of the Respiration of Aquatic Insects." All insects respire by means of numerous tracheæ, which, opening on the surface of the body, admit the atmospheric air; the process is simple and direct in aerial insects, for they, by a muscular action not unlike to that of deglutition, suck it, as it were, into their bodies. Aquatic insects, on the other hand, exercise a double function; sometimes they come to the surface, and then the air is drawn in; but at other times, when they are under the surface, it is subtracted from the water itself, by means of an apparatus which has been called their bronchiæ, although very different from the so-named organs of fishes, for the bronchiæ of insects are for the purpose, not only of admitting the aerated water, but also of separating from it the dissolved air, which then enters the tracheæ, and permeates their bodies.

Now the question which M. Dutrochet undertakes to solve is—"By what mechanism is the separation or evolution of the air from the water effected?" He founds his opinions on the beautiful experiments of Humboldt and Gay Lussac, on the reciprocal transit of certain gases through interposed septa; when a mixture of oxygen, azote, and carbonic acid, in any proportions, is enclosed in a bag having permeable walls, and the bag is then immersed in aerated water, it was discovered by these distinguished philosophers that there is a reciprocal passing through, from within outwards and from without inwards, of the gases; and that this process goes on till pure atmospheric air is left in the cavity. Dutrochet conceived that a similar change might be effected by aquatic insects, which live immersed under water; they are all provided with bronchiæ, which, being very superficial, allow the gases contained within to communicate with the air dissolved in the surrounding medium; the same interchange may, therefore, take place, as we have described above, when a bladder was used as the septum, and probably with much greater rapidity, in consequence of the air in the body of the insect being contained in a number of tubes instead of one bag, and thus a larger surface being exposed to the action of the water. The instinctive motions of the insect also unremittingly accelerate the process, so that the bronchiæ are placed almost, as it were, in a running stream, a condition the most favourable for the conversion of the confined gases into the pure air. The air within the bronchiæ, previous to the change, is probably adulterated or carbonated atmospheric air. Reaumur once observed that a caterpillar (whose organization is fitted only to live in air) continued to live under the surface of water during its larval and crystalis states; it had enveloped itself in its silken shell, and this shell was further protected by some leaves of the "potamegeton lucens." When the shell was broken, it was found to con-

tain air, which, doubtless, had been renewed in the manner we have described above.

Séance of 4th February.

HERMAPHRODISM.

M. Isidore Geoffroy St. Hilaire read a memoir, entitled, "Anatomical and Physiological Researches on Abnormal Hermaphrodism in Man and the Lower Animals." The generative apparatus of either sex may be advantageously divided into three portions or segments, which in many respects are quite independent of each other, and any one of which may present abnormal characters diametrically opposed to, and differing from, the organs with which it is associated. These segments are, 1, the deep-seated organs, viz. the ovaries in the one sex and the testicles in the other, with their separate appendages; these parts derive their blood from the spermatic vessels. 2. The middle, or intermediate organs, viz. the womb, and the prostate and vesiculæ seminales, with their appendages; the bloodvessels come from the hypogastric. 3. The external organs, viz. clitoris and vulva, and penis and scrotum; nourished by branches of the external iliac bloodvessels.

The numerous cases of hermaphrodism may be arranged in two classes, according as the hermaphrodism is without or with excess of parts. The first class is subdivided into four groups—1. Masculine hermaphrodism, in which the generative apparatus is essentially male. 2. Feminine hermaphrodism. 3. Neutral hermaphrodism, the apparatus having no determinate sexual characters; and, 4, Mixed hermaphrodism, the apparatus presenting a real "melange" of both sexes. The second class admits of three subdivisions. 1, Complex masculine; 2, Complex feminine; and, 3, Bisexual hermaphrodism. From the facts adduced in the memoir, the author draws the following conclusions:—

Perfect hermaphrodism, in the anatomical sense of the word, has never been observed. The most complex cases are those in which the deep-seated and intermediate organs are double, the one set being male, the other set female; but in no case have the external organs been found associated together; and, in truth, the penis and clitoris could not co-exist, in consequence of their attachments to the pelvic bones, unless, indeed, there was a complete confusion of the ordinary connexions and relations of the parts. Anatomically considered, perfect hermaphrodism is almost impossible, but its physiological existence is indubitable in those animals, as fishes, &c. in which the two halves of the generative apparatus are, in the normal state, much apart from each other, and which animals have no copulation. The frequency of hermaphrodism in general, and of each kind in particular, is very different in the different groups of animals. In the human species, the masculine and feminine sorts are very rare. The rules laid down by medico-legal authors to determine the sex, in many dubious cases, are very unsatisfactory; for, hitherto, only a very small number of the combinations which Nature presents have been distinguished. The difficulty of accurately determining the sex results from the fact, that whereas the internal organs vary so much in number, structure, and arrangement, the external ones preserve their normal number, and the modifications in the other respects, having partly male and partly female characters, are confined within narrow limits. It is, therefore, impossible, that a separate or particular arrangement of the external parts can correspond with each individual or special disposition of the internal organs. M. St. Hilaire remarks, in conclusion, that the legislative division of people into only two classes, viz. males and females, is imperfect; for there can be no doubt that some individuals have really no distinct sex, such as the neutral and some of the mixed hermaphrodites; also those who present the two sexes in nearly the same degree, and are, therefore bisexual.

ADULTERATION OF SALT.

It appears that in many parts of France, this indispensable alimentary

substance is frequently adulterated, to evade the heavy tax laid upon it. It is sometimes mixed with saltpetre, Paris-plaster, salt of tartar, Glauber salts, sand, &c. Government has therefore issued a police ordonnance, imposing a heavy penalty on all manufacturers, refiners, and merchants, in whose possession any adulterated salt is found.

Séance of the 18th.

LUMINOUS URINE.

A great error has been committed by some, in supposing that the statements of Reiselius and Pettenkover respecting the above appearance, warrant the belief, that the urine is in itself, and while it is discharged, ever phosphorescent; all that these authors have asserted is, that they have observed a luminousness on the ground which has been pissed upon; the correct explanation of which phenomenon is, that certain insects, as the common earth-worm, some species of scolopendra, &c. when wetted with urine, give out a degree of light which lasts for about a minute. It is however to be remembered, that phosphorus taken internally causes the stools to be luminous, in consequence of the phosphorus passing through the intestines, and being voided undecomposed.

ANATOMY OF THE MEDUSA MARSUPIALIS.

Dr. Milne Edwards has lately discovered in this zoophyte, (which hitherto has been considered to consist only of a simple mass of gelatine, without any distinction of parts) not only a mouth, provided with tentacula, a stomach, and a number of vessels, but also organs of a more complex structure, analogous to the biliary canals, and to the ovaria of insects.

M. Cuvier had previously established that some of the medusæ are not simple gelatinous masses; for although he could not find any mouth, he discovered numerous suckers, analogous to the roots of plants, and a digestive cavity, under the form of canals permeating every part of the body, and which performed the functions both of a stomach and of a heart. Others of these zoophytes he considered to consist of a homogeneous jelly, and were denominated by him "*agastriques.*"

ON THE ASCENSION OF THE ROOTS OF SOME PLANTS.

M. Dutrochet has observed, that there is a remarkable difference in the cortical substance of those rootlets which mount upwards into the air, from what is found in those which strike into the earth. The genera cactus and pothos furnish the most curious examples of this anomaly; we see considerably sized roots arising from these plants at some distance above the soil, and shooting vertically upwards; and others also after creeping horizontally along the ground, bending up into the air. In all these ascending roots, M. Dutrochet found that the cortical substance greatly preponderated over the central substance of the roots, and that the cells of the cortical substance decreased in size from within outwards; and not as in ordinary descending roots, from without inwards; in the one set, the largest cells are nearest the central system, in the other they are nearest the bark.

March 11th.

Sir Astley Cooper was elected a corresponding member of the Academy, in the section of medicine and surgery, in the room of the late M. Delpech.

Dr. Robert Brown, whom Humboldt has styled "botanicorum facilè princeps," was elected a foreign associate of the Institute. The competitors were Bessel, of Konigsberg—Buck, of Berlin—Dr. Faraday, of London—Sir John Herschel—Jacobi, of Konigsberg—Meckel, of Halle—Mitscherlich, of Berlin—Ærsted, of Copenhagen—and Plana, of Turin. Out of 47 votes, Dr. Brown had 29. The election awaits the royal assent.

Dutrochet, in the name of MM. Serres, Dumeril, and himself, reported upon a manuscript of M. Geoffroy St. Hilaire, the son, entitled "Anatomical and Physiological Researches on Her-

maphrodism, in men and animals." He very justly stated, that unless we have accurate and precise notions on the normal formation and development of the various organs of the body, from the earliest period of embryotic life to the time when the fœtus is a perfect being, and fitted for an independent existence, the department of philosophical anatomy which attends to the doctrine of monstrosities, or the science of teratology, as it has been called, can arrive at no satisfactory conclusions on any of the deviations from ordinary structure; hence it is, that, until within a very few years, teratology was only a history or assemblage of disjointed and unintelligible observations, and of crude and whimsical conjectures. Thanks to the distinguished labours of M. Serres, that we now, in some measure, know how Nature proceeds in the simultaneous or successive development of the organs of animals, and have been taught that, in the fœtus of the mammalia, the various organs pass through several transitory conditions or phases of formation, and that these conditions correspond with the normal or permanent conditions of the same organs, in animals which are lower in the scale of existence. Hence we can readily understand, that a monstrosity arises frequently from the progress of these transition-developments being suddenly arrested, and from an organ thereby presenting, at the period of birth, one of its anterior or pre-existent conditions. The discovery of the laws of eccentric development, made by M. Serres, who has shewn that the two longitudinal or symmetrical halves of an animal body are developed, up to a certain point, independent the one of the other, explains very beautifully how the organs of one side may be dissimilar from those of the other side; but it leaves unsolved the curious question of hermaphrodism, or how the organs appertaining to the two sexes may coexist in one of the halves. M. Serres is aware of this, and has most ingeniously attempted to account for it, by referring to the influence exerted upon the development or non-development of organs, by the persistence or obliteration of the bloodvessels destined for their growth. He says that the organs which are nourished by different vascular trunks are independent of each other in respect of their formation, although, perhaps, not of their uses and functions. If we apply this doctrine to the examination of the sexual organs, we at once perceive that the deeply-seated or essential organs of generation, derive their bloodvessels from a different source from what supplies the exterior, or mere auxiliary organs; the one set are supplied by the spermatics and hypogastrics—the other by branches from the external iliac and crural vessels. As we have previously explained (*vide* Séance of Feb. 4th), M. Geoffroy St. Hilaire, the father, has, with great sagacity, shewn that the generative organs in either sex are composed of three parts or segments, independent of each other in respect of development, although not of function, and nourished by bloodvessels from distinct sources. This gives us a key to the explanation of many of the cases of hermaphrodism.

Dr. Pamard related a case, to illustrate the good effects of the exhibition of a large quantity of metallic quicksilver, in acting upon and dislodging some balls of lead which had been swallowed, and, becoming obstructed in the intestinal tube, had occasioned alarming symptoms.

Three pounds and a half of the quicksilver were taken on the morning of the 19th Dec. The patient experienced no uneasiness, but what appeared to arise from the great weight of the metal; in the course of three hours he vomited, and severe colicy pains supervened, but none of the mercury was rejected. On the following day the vomiting continued, and, for five successive days, croton oil and oily enemata were given; the stools contained a black powder, and also a quantity of the metallic quicksilver; when it was carefully collected and washed, it was found to amount to 3 lbs. 6 ozs. and 4 drachms; part of it was quite pure—the rest of it contained nine grammes, or about 2½ drachms of lead. Five grammes of the

black powder, when analysed, was found to contain five decigrammes, or a tenth of its weight, of lead.

The author concludes his remarks by stating, that the mercury must have acted upon, and amalgamated with, the lead, "since all the morbid symptoms disappeared."

Séance of the 17th.

M. Boussingault read a memoir on the thermal waters of the Andes, in South America. He found that the opinion of La Place, respecting the diminution of the temperature of hot springs, in proportion to their elevation above the sea, is correct, except when the waters issue from volcanic rocks; for it appears that, in this case, the local cause which produces the volcanic phenomena has a very marked influence on the temperature of the springs; and M. B. is of opinion that all the equatorial thermal waters, at least those which occur in trachytic beds, derive their heat directly from a volcanic source, as he found that they contained the same gases as are emitted from craters, viz. the carbonic acid and the sulphuretted hydrogen: it is now a question of very curious interest, whether the saline substances also dissolved in such waters are drawn from the bowels of volcanoes. The Memoir concludes with some remarks on the constancy or changeableness of the temperature of the South American springs; the thermometric observations of M. Boussingault sometimes agreed, and at other times differed from, those of Humboldt, made between twenty and thirty years before. Perhaps the earthquake of 1812, which was felt along all the shores of Venezuela, and which destroyed Caraccas and many other towns, may have had considerable influence on the temperature, as well as upon the other qualities, of these mineral waters.

II. ACADEMY OF MEDICINE.

Séance of 15th January.

M. MAINGAULT made some remarks on tracheotomy, and on the introduction of caustic substances into the trachea, in croup and diptherite. He recommends that the tube be opened very cautiously, and that the opening be made small at first, and gradually enlarged, to prevent the too rapid entrance of the air, which might cause asphyxia. The use of caustics he condemns. M. Velpeau, on the other hand, denies that any danger has ever followed a free opening into the trachea, and ridicules any apprehensions on the score of asphyxia. As to the employment of local caustics, M. Velpeau adverts to four cases of success, treated by M. Bretonneau, and one by M. Trousseau. A solution of nitras argenti was introduced into the wound by means of a small bit of sponge wet with it, and a few drops permitted to flow into the trachea. There can be no doubt of the efficacy of the topical use of the caustic in "angine couenneuse," or diptherite.

DOUBLE, OR BILOBED UTERUS.

M. Moreau presented a very beautiful specimen of a uterus divided completely into two equal lateral halves; each provided with a tube and an ovary; each separated from the other by a double partition, and each having distinct necks and mouths into a single vagina. The woman died after an accouchement;—the fœtus was a male, and had been developed in the left cavity; and therefore not in accordance with the whimsical idea that the right ovary furnishes the male, and the left one the female germs.

DISEASE OF THE KIDNEYS.

M. Tanchore presented, for the inspection of the Academy, a diseased kidney, which had acquired the size of a child's head, and caused during life such a prominence of the abdomen, that some physicians had supposed that the liver was much enlarged, and was the seat of the disease. The patient had suffered very little pain, although his urine was almost always purulent. A sinapism had been very imprudently applied to one of his limbs, which had become œdematous;—gangrene was the consequence, and of this he died. On dissection, the iliac and femoral arteries

were found obstructed with masses of lymph. The left kidney was enormously enlarged, and embossed, or lobulated on the surface; each lobule containing a deposit of pus. A large calculus was imbedded in the centre of the organ, and surrounded with a cyst of lardaceous matter.

BILOBED URINARY BLADDER.

M. Velpeau exhibited a specimen of this rare formation; the second, or subsiding pouch, was small and situated posteriorly, and communicated with the anterior pouch by an opening near to the trigone. A calculus was found in the anterior pouch;—it could have been extracted only by the high operation, as the incision in the lateral mode must have been made into the posterior bag.

Séance of 22d.

M. Dubois read an interesting paper on the probable causes of the general presentation of the head in labour. The old opinion that it depends on the greater weight of the head, which thus gravitates to the depending part, will not well stand the test of enquiry. M. D. found that in numerous experiments, wherein he placed the body of a fœtus on the surface of water in a bath, and allowed it to subside; the back and shoulders, and not the head, reached the bottom first.

Moreover in women, who keep the horizontal position during the whole, or greater part of gestation, the presentation is still usually that of the head; and even with acephalic monsters, the same very generally holds true. It is well known that the head of the fœtus is proportionably larger and heavier in the early, than in the later months of pregnancy;—now a necessary consequence of this should be, according to the old interpretation, that the head be invariably dependent; but is it so? No, certainly; for the earlier the miscarriage, the more frequent is an abnormal presentation. The following table shews this very satisfactorily.

Abort. before 7 mo.	Head.	Pelvis.	Shoulder.
1829.... 30	.. 22 ..	7 ..	1
1830.... 35	.. 16 ..	18 ..	1
1831.... 23	.. 13 ..	9 ..	1
1832.... 34	.. 14 ..	17 ..	2
122	65	51	5

According to this table, the number of the pelvic presentations is to that of the cephalic as 4 is to 5; whereas, at the full period of gestation, it is as 1 to 20. Again, in the lower animals, whose pelves are so inclined as to preclude the operation of gravity, the fœtus' head is towards the os tincæ.

M. Dubois having thus objected to the former hypothesis, advances one of his own, and explains the cause of the head presenting "to a desire, or besoin d'etre, which Nature has impressed upon the fœtus," as if the little one was instinctively, or even voluntarily led to push out its head foremost!! [Just as we see people prefer a station near a door or window in a very crowded room —*Ed.*] In proof of the opinion that the fœtus is endowed with "déterminations instinctives, ou voluntaires," M. Dubois adverts to the greater frequency of abnormal presentations, when the fœtus has died; to its movements while in the womb, induced by firm pressure on the abdomen, change of position of the mother and so forth; to its struggles when the umbilical cord is compressed, so that it has been known that the liquor amnii has rushed into the thorax dilated by the violent effort of the muscles of inspiration; and lastly, to the admitted act of instinct in the case of the chick, when it breaks the shell of the egg to make its escape. M. M. Virey, Velpeau, and Capuron objected to the views and reasonings of M. Dubois. The memoir was however much applauded by the Academy, and ordered to be printed in their collection.

MUCOUS FEVER.

A report was read, of an epidemic which has lately prevailed at Besancon and the neighbourhood. This fever is the pituitous fever of the ancients, and a gastro-enterite, as a matter of course, of the Broussaian or physiological school; and correctly too, for there is certainly an inflammatory affection of

the mucous lining of the alimentary canal, even although the symptoms do not very strongly indicate the mischief. The observations of M. Andral are so pertinent, that we cannot do better than insert them.

"In 98 out of 100 cases of essential fevers, some morbid changes are found upon dissection; but we are not to expect any well-marked or determinate relation between these changes and the preceding symptoms during the lives of our patients. If we were to judge by post-mortem examinations only, we should often believe that inflammatory, bilious, catarrhal or mucous, typhoid or adynamic, nervous or ataxic fevers, were one and the same disease. External symptoms, however, sufficiently attest important differences between these, and these differences require corresponding differences of the therapeutic indications." Having proved, by most extensive researches, that the appearances of the tongue do not faithfully indicate the state of the intestinal canal, M. Andral inculcates the necessity of diligently attending to the signs furnished by it, for these signs he deems to be more useful in directing us to a proper treatment than any "*cadaveric lesions.*" A red tongue, says he, although it does not necessarily announce intestinal irritation, indicates the propriety of antiphlogistic remedies—an enlarged, white, or yellow tongue requires emetics—and a dry, black tongue forbids, whatever may be the state of the digestive organs, the use of whatever enfeebles or exhausts the system.

[Although somewhat out of place, we are tempted to introduce some remarks by Professor Lobstein, of Strasburg, on the subject of fevers, as they much tend to confirm the opinions of the distinguished French pathologist.]

I am satisfied, says he, that the post-mortem appearances, in typhus fever, are not to be considered as the actual exciting causes of the disease, and of its symptoms; for the serous infiltration of the membranes of the brain is very frequently found in cases which have no relation with nervous fever. The injection or inflammation of the gastro-intestinal mucous membrane is by no means a constant phenomenon, as we have been assured repeatedly by our own researches, and as is testified by the observations of MM, Petit, Louis, Martinet, and Andral; and, lastly, the dothinenteritis, or ulcerative inflammation of the mucous glands of the bowels, so much insisted upon by Bretonneau, although very frequently met with, is sometimes altogether wanting, as Alison, of Edinburgh, and Neumann, of Berlin, have proved; and, moreover, it occurs in other diseases, as in scarlatina, phthisis, &c. without producing any of the symptoms of typhus fever. We are, therefore forced to reject all these theories, if they are propounded as exclusive; sometimes they, or at least the facts on which they are said to be built, are right, and sometimes wrong; and, in very numerous cases of fever, we can recognize only an affection of the nervous centres as the exciting cause of the diseases.—*Vide Arch. Gener. Janvier.*

Séance of 26th.

A very singular case of paraplegia, accompanied with complete constipation, and the suppression of urine during the space of 14 years, was communicated by Monte-Santo, of Padua.

Several years before the accession of the paralytic symptoms, the patient had sustained a fall from a height upon his back; none of the vertebræ were fractured, but the concussion had been so severe, that he never recovered entirely from its effects. For 14 years his appetite was strong, and he eat his food heartily; after each meal, he drank largely of water, and after the lapse of two hours, he felt obliged to take another large draught, in order to induce the vomiting of such food as he had swallowed; this painful operation recurred every day, from two to five hours after eating. About once a month, he had the sensation of, as it were, a ball, which rose from the stomach to the mouth; this lasted for four hours or so, and then a large quantity of feculent matter, mixed with blood, was vomited. On no occasion was there the least appearance, not even any smell, of urine in these egesta; the renal secretion

seemed to be quite suppressed. Since March, 1829, the fæcal vomitings have never occurred; but each repast is rejected more quickly after it has been swallowed than before. The digestion and assimilation of the food still, however, go on perfectly well, for the patient has of late become so plethoric, that he has repeatedly required bleeding. He still lives, and MM. Graefe and Frank have visited the individual, and confirm the accuracy of the above statements.

A similar case was communicated to the Academy, in 1823, by M. Denis. There was no alvine evacuation per anum, nor excretion of urine, for 72 years. Probably the kidneys had become atrophied.

Séance 5th March.

SINGULAR VARIETY OF HERMAPHRODISM.

A person was admitted on the 7th April of last year, as a male patient into the hospital La Pitié, labouring under cholera. He died next day; he gave his name as Valmont, said that he was 62 years of age, was a widower; and that his trade was that of a hatter. His aspect did not lead to any suspicion; and he had a beard "assez epaisse."

M. Bouillaud was therefore not a little surprised upon finding a distinct and well-formed uterus, when the body was opened; his constant engagements at that busy period prevented him from prosecuting minutely the examination, and he therefore removed all the organs of generation and put them into spirit. M. Manec, the eminent anatomist, carefully dissected them. The penis was of ordinary size and well formed, having a glans and prepuce; the meatus urinarius was not exactly in the centre of the glans, but somewhat nearer its lower part; the scrotum was rather small, but otherwise quite masculine, being brown and puckered; divided by a longitudinal raphe, and shaded with hair; there was however no trace of testicles; nothing but such cellular tissue as we find in the labia pudendi, or nymphæ. The mons veneris was fuller and more prominent than in man; the internal organs were two ovaries, two fallopian tubes, and a well-formed uterus, of the usual size in the virgin state; it was altogether "d'une conformation, qui ne laisse rien à désirer," and situated between the rectum and bladder; it opened by a regular os tincæ into a vagina, which was of an average size, and two inches in length; where the vagina was close to the neck of the urinary bladder, it suddenly contracted, and at the membranous portion of the urethra it was reduced to a very small tube, which after turning upwards opened by an orifice of the diameter of about two millimetres, into the membranous portion, so that the urethra was in fact the continuation of the vagina. Beyond the opening, the urethra had all the characters of the male one; at the neck of the bladder, it was surrounded by a prostate; and a distinct verumontanum, with the orifices of the prostatic ducts opening at its side, was found. The corpus spongiosum urethræ, and the two corpora cavernosa penis were of the usual size and appearance; the acceleratores urinæ were very large; Cowper's glands also existed. There was no trace of testicles, vasa deferentia, or vesiculæ seminales; a sort of round ligament passed through the inguinal canal.

It is stated that the general form and configuration of the body was intermediate between that of the male and of the female sexes; and M. Bouillaud is of opinion that the person was in the "juste milieu" between a man and a woman; he indulges in a long train of amusing imaginings on the character, actions, and general conduct of the individual; in allusion to his marriage he rapturously exclaims "Comment s'est il comporté dans l'act du coit? Quels transports pouvait-il éprouver aupres d'une femme?" and wishes the Academy to solve the question, whether Valmont "a veritablement ressenti l'aiguillon de la chair; et dans ce cas si c'est plus specialement l'aiguillon de la chair masculine, ou celui de la chair feminine; ou bien encore s'il aura été tour-a-tour en proie au

stimulus de ce double aiguillon; ou si par une sorte de neutralisation d'une sexe par l'autre, Valmont sera resté dans un état d'indifference en matiere generatrice." His less imaginative bretheren MM. Geoffroy St. Hilaire and Manec, content themselves by shewing that even the above is not an instance of true hermaphrodism; we must distinguish the organs of reproduction, and those of mere copulation; there may be an amalgamation, or coexistence of the latter, but not of the former.

Those who wish minuter details must consult the March No. of the *Journal Hebdomadaire.*

Séance of March 26th.

M. Girardin made a report on the state of vaccination in France, during the year 1831. It appears from the documents presented by him, that the number of persons vaccinated has diminished progressively since 1827.

Spirit of the Foreign Periodicals.
(Continued.)

LXI. SATYRIASIS, FOLLOWING A BLOW UPON THE OCCIPUT.

A man, aged 53, of very quiet and religious habits, accidentally struck the back part of his head and neck against one of the corners of his bed. There was considerable contusion, but no farther injury. Very soon afterwards he became quite satyriacal; formerly modest and decorous, he was now so vehemently salacious, that no woman could approach him without risk of being insulted. Even his own daughters were not safe from the rage of his lust. For three months, this state of erotic excitement lasted; his physical and intellectual powers became enfeebled and childish, so overpowering was the predominance of this one passion. After a fit of furious anger at his wife, for refusing him conjugal rights, he fell into a convulsion, complained of an intense pain at the crown of the head, and, from that moment, all uneasiness at the occipital region ceased—the satyriasis left him, and in its place a religious delirium, indicated by a constant muttering of prayers, succeeded. He became slightly paralytic on the left side, and died on the 8th day after the sudden change in the symptoms. Unfortunately, permission could not be obtained to examine the encephalon after death; and we are, therefore, left in the dark as to any organic changes.

The metastasis of diseased action from the cerebellum to the vertex (where the organs of veneration and hope are situated), and the corresponding change in the dominant emotions, are curious and worthy of notice. Dr. Gall has stated, "that wounds and blows on the occiput or nucha have been followed by inflammations of the genital organs;" and M. Voisin, in his work on the Moral and Physical Causes of Mental Diseases, has the following pertinent remark—"the material condition of satyriasis resides in the encephalon; and in all cases, the inordinate passion is in proportion, either to the original over-activity of the cerebellum, or to the occasional circumstances which have caused the organ to be violently excited." In the treatment, therefore, of such cases, our attention ought to be directed specially to the remote or essential cause. M. Voisin has adduced numerous cases, in confirmation of the superior efficacy of such a ratio medendi. Satyriasis and its consequence, masturbation, are not unfrequently met with in such hydrocephalic patients as have arrived at puberty; and Dr. Gall has insisted upon this, as a strong argument in favour of the encephalic origin of the disease. Those who have had an opportunity of examining satyriacal patients will agree with us, when we state that the orgasm of venery frequently does not pass away with the seminal emission, but that the penis will remain erect, and the semen be every now and then squirted out, for a considerable time. The intellectual powers are almost always greatly impaired, the miserable wretches living under the tyranny of their lusts. Now it is not easy to render a philosophical interpretation of these facts, except upon phrenological principles; and if they be admitted as true, the interpretation

is at once obvious and satisfactory. There is an every-day occurrence which deserves notice, as it is in the power of any one to test its reality on himself; we allude to the venereal desire being very generally excited by lying flat upon our back. It seems as if the cerebellum was stimulated by the slight congestion thereby induced.—*Transact. Medicales.*

LXII. Anomaly of the Arch, or Curve of the Aorta.

Dr. Vidal examined the body of an old woman, in whom he found that the arch of the aorta was bent forwards, or sternad, from left to right; it then descended in front of the right pulmonary vessels, passed behind, or dorsad, to the pericardium, and recovered its normal situation before piercing the diaphragm. The vessels given off from the arch were, first, the left carotid, then the right carotid, the right subclavian, and, lastly, the left subclavian, which, before reaching the clavicle, passed between the œsophagus and spinal column. The remains of the ductus arteriosus shewed that the canal had, originally, existed between the left pulmonary artery and the left subclavian.—*Journ. Hebdom.*

LXIII. Two Cases of Œsophagotomy.

A soldier, while eating soup, accidentally swallowed a bone. He applied immediately for assistance to the surgeon of the regiment, and a variety of means was tried to remove it; but all in vain. On the fourth day after the accident, he was put under the care of M. Begin. By introducing a caoutchouc sound down the pharynx, he found that it passed about seven or eight inches, and was then obstructed by a foreign body, which was hard, and immoveably fixed in its place; this seemed to be in the œsophagus, immediately below the level of the cricoid cartilage. No forceps could reach this depth, and the severe pain caused by the firm pressure of a probang, forbad any attempt to push the bone down into the stomach. The patient experienced much anxiety and distress in his breathing. It was proposed to give him an emetic, but the reporter states, that "la deglutition etoit trop difficile, et ce plan ne put recevoir d'execution" (the wherefore is not very obvious.) On the sixth day, the saliva was mixed with purulent matter; but the bone stuck as fast as ever, and now three grains of tartrate of antimony were exhibited; the patient vomited freely, and felt himself relieved; the probe did not, however, indicate any favorable change in the position of the bone. The respiration was moderately easy, and he could swallow fluids with little inconvenience. The quantity of pus which escaped from the mouth had increased in quantity for some days past.

As all means to dislodge the bone had been tried without effect, M. Begin resolved on the 12th day after the accident, to attempt its extraction, by cutting down upon the œsophagus. An incision was made between the trachea and the inner margin of the sterno-mastoid muscle, extending from the sternum, to the upper edge of the thyroid cartilage. The omohyoideus muscle was divided across, the trachea drawn to the right side of the wound, and the carotid artery, jugular vein, and par vagum, to the left; a branch of the superior thyroid required the ligature. On carefully continuing the dissection, a drop of pus followed the stroke of the scalpel; a director was then carried deep into a large sac, lying close to the gullet, and a bistoury carried upwards and downwards, so that the anterior parietes of the sac were divided to nearly the extent of the outward wound; a large quantity of pus mixed with shreds of cellular substance flowed out; the left fore-finger was now introduced, and the thin intervening septum of the walls of the œsophagus was distinctly felt; by gently rubbing and pressing this, it gave way, and the finger passed into the gullet itself; still no foreign body could be found; a mouthful of drink was given, and this escaped from the wound. The

opening in the œsophagus was cautiously enlarged by the bistoury; a large vessel, probably the superior thyroid, sprung; the bleeding orifice could not be found, but was at length secured by passing a needle fairly round and thus inclosing a button of the surrounding parts in the ligature; the finger being now passed as deep as it could be carried, felt the bone, impacted in the tube of the œsophagus, nearly opposite to the upper piece of the sternum; a bent forceps was then introduced, and attempts were made to lay hold of the bone; but in every attempt, it seemed that the walls of the œsophagus got included between the blades. A blunt-pointed tenaculum could be used more easily, by inserting it round the lower surface of the bone, and then gently dragging it upwards, till at length it was fairly extracted; a quantity of pus and of sloughy cellular substance escaped at the same time. The operation occupied 25 minutes. Absolute abstinence was enjoined, and the mouth was only moistened occasionally, to relieve the thirst; on the following day, an elastic gum tube was passed into the stomach, and some broth given. The progress of the case was altogether most favourable; the wound gradually healed, the food ceased to escape by the orifice, and the patient ultimately quite recovered.

Case 2. B. J. was brought to the hospital on the 30th Feb. 1831. On the preceding day he had swallowed a bone, which stuck in the gullet, and could not be removed. An emetic had been given, and although free vomiting was induced, no benefit followed. So firmly was it impacted, that no tugging with forceps, or with probangs passed beyond it, was of any avail. It did not altogether block up the tube, for small brobangs, or rather probes curved at the end, might be introduced further down than it lay, although with some difficulty; considerable purchase might therefore be employed, during the withdrawal of these; but in spite of every effort, the foreign body could not be dislodged. The respiration and deglution being easy, the surgeons were unwilling to resort to an operation at present, as there were good grounds for expecting that the bone might be gradually loosened, if not by the motions of the canal, at least by suppuration. But these hopes were speedily found to be fallacious, and the patient suffered such distress that he was urgent that something be done for his relief. On probing the œsophagus, it was thought, that the bone had descended somewhat as it could not be seized so easily as hitherto with the forceps. M. Begin therefore resolved to operate, and the operation was performed on the eighth day after the accident. The steps of it were very similar to those in the preceding case; the integuments were freely divided, the trachea and œsophagus separated from the sheath of the great cervical vessels, and then the finger introduced deep into the wound; the bone was felt through the walls of the gullet, somewhat below the level of the upper edge of the sternum. The bistoury was carried along the finger as a probe, in order to avoid any injury to the inferior thyroid vessels, and a small opening was made into the œsophagus; this was gradually enlarged, till the finger could enter freely into the tube; the bone being now felt distinctly, a pair of long and curved forceps was introduced, and with much difficulty the bone extracted. Not above two table spoonsful of blood were lost.

The subsequent treatment was the same as had been so successfully adopted on the former occasion; all the food was introduced by means of a stomach tube. On the 4th day, a healthy suppuration was established, and the wound slowly closed. He was discharged in six weeks perfectly well.—*Journal Hebdom.*

The boldness and dexterity displayed by M. Begin in undertaking and successfully performing the hazardous operation of œsophagotomy, shew that he is one of the best surgeons in the French metropolis. His example has been ably followed by Mr. Arnott, in a case which occurred lately at the Middlesex Hospital.—ED.

LXIV. Extirpation of a Tumour from the Neck. Death from the admission of Air into a Vein.

A young girl was admitted into the La Charité for the purpose of having a large tumour, situated on the side of the neck, removed. M. Roux was the operator. The dissection was tedious and difficult; and when nearly completed suddenly a peculiar whizzing sound was heard, as of air rushing through a small aperture into a vacuum—the patient uttered a feeble cry, and became convulsed; the respirations were deep and only at long intervals, a mucous râle could be heard distinctly in the chest, the pulse was hurried and very weak, and speedily all the appearances of death ensued. Frictions on the epigastrium, tickling the nostrils and dashing cold water on the face, gradually resuscitated the patient; the speech at first was confused and stammering, and a quantity of mucus and saliva dribbled from the mouth. The operation was completed by passing a ligature round the base of the tumour. For the five following days no bad symptoms appeared; on the sixth, the mass of the tumour was in a state of sloughing and emitted an abominable stench,—it was therefore removed. On the next morning the patient became comatose and died.

Dissection. By carefully examining the situation of the tumour, it was ascertained that the sheath containing the carotid artery, jugular vein and par vagum, had been opened during the operation, and that the vein had been divided across; the lower or sternal end lay gaping; and on introducing a probe it passed readily down to the junction with the subclavian. The bronchial tubes were filled with a frothy mucus, and there were several emphysematous points under the pulmonary pleura. The cavities of the heart were found quite empty; when the aorta was pricked at different parts of its course, bubbles of air mixed with a bloody serum oozed out; even the same was observed in the common iliacs, although in a less degree. Nothing abnormal was found in any of the veins; and no air could be discovered in any of the cerebral vessels.

Remarks. Bichat was of opinion that in such cases as the preceding, the death is attributable to the paralysing effects of the contact of air on the brain. Nysten and Magendie have ascribed it to the forcible and permanent dilatation of the heart. M. Leroy d'Etiolles, in his memoir on asphyxia, endeavours to prove that it may be occasioned in three different ways, either by the deleterious agency of the air on the cerebral substance; or by the pulmonary emphysema; or lastly by the disturbance of the actions of the heart. The extreme rapidity of the death makes it probable, that the heart is the organ primarily affected; in some cases the patient has died in a moment; the centre of the circulation suddenly ceasing to act.—*Journ. Hebdomadaire.*

LXV. Insalubrity of Paris.

A commission of health was lately appointed to inquire into the causes of the great unhealthiness of the quarter of St. Martin in Paris. Its situation is low-lying, and a great part is not above the level of the Seine; the soil on which it is built is therefore alluvial and excessively damp; there are moreover some manufactories, such as those of "poudrette" (human dung reduced to powder as a manure) which must inevitably be injurious to the residents; there is the canal of Saint Martin, constantly giving out its malarious miasmata; there is the densely crowded state of the buildings, the huddled together population of the lowest classes of society, living in rooms or hovels where they have scarcely air to breathe; besides, this air is infected with the most noxious and abominable effluvia from the disgraceful condition of most of the privies and necessaries, private as well as public; they have been so constructed as to permit the escape of the urine and much of the fluid filth, (which thus runs down in the kennels of the streets) in order to save the ex-

pense of frequent cleanings; and many are situated close to, and alongside of the wells, which afford the water that is drunk by the inhabitants: various plans have been suggested with the view of obviating this disgusting state of things. In our opinion by far the best would be, a police order to shut up all deep privies or "fosses," and to substitute in their place "sieges," fitted with removeable reservoirs, on the plan of the portable water-closets, or of Chaumette's apparatus. "Some have asked, why is Paris not provided with drains and sewers, as London is, to carry off into the Seine, as into the Thames, all the "immondices?" but it seems to have been forgotten, that the topographical position of the one city is very different from that of the other, and that the Seine cannot be properly compared with the Thames; and even supposing that sewers might be conveniently made, we deem them unnecessary in many respects; for surely the "immondices" of a city were never destined to infect and pollute the waters of a river; but they should rather be used to enrich and fertilize the earth; a system of sewers may therefore be fairly objected to, as injurious not less to the hygienic than to the agricultural interests"!—*Revue Med.*

LXVI. IMPERFECT INTERAURICULAR SEPTUM, WITHOUT CYANOSIS.

A child aged seven years died of small-pox. On dissection it was found that the septum between the two auricles of the heart was reticulated and made up of an open mesh of fibres, between which any fluid might pass freely from one side to the other. The child had not during life exhibited any symptom of cardiac, or pulmonic distress; there had been no lividity of the surface, no dyspnœa, and no chilliness of the skin; and indeed, had the body not been examined, the imperfection would never have been suspected; the heart was hypertrophied, and there was a considerable quantity of serum in the pericardium. M. Pigeaux states that out of 13 cases of open, or of imperfect interauricular septum, which he has met with, only two were accompanied with cyanosis.—*Revue Medicale.*

LXVII. EXTIRPATION OF A DISEASED OVARY.

A. D. aged 31, mother of four children; during her last, the fifth, gestation, the abdomen was so enormously distended that it was thought that she was pregnant of twins. The size, however, was not much abated after delivery, and it was then ascertained that it was caused by an enlarged ovary on the right side. A trocar was introduced, and 14lbs. of a serosity were drawn off; the limits of the swelling could now be more easily defined; and, as it felt hard and fluctuating, the trocar was inserted at another point, and 12lbs. more of a watery fluid were evacuated. Dr. Ehrhartstein decided on its extirpation, which was performed eighteen weeks after delivery.

On exposing freely the diseased mass it was found to have contracted adhesions to the surrounding parts; these were cautiously severed, and the tumour extracted in fifteen minutes from the commencement of the operation. Only three vessels required ligatures. Severe febrile symptoms supervened, and lasted for several days. On the eighth day a profuse discharge of bloody serum and of gas escaped from the wound, with great relief to the patient. In nine weeks the wound had healed completely.

The diseased ovary weighed 12lbs. and when cut through exhibited numerous cavities, partly filled with a serosity. The three vessels which had been divided, were of the size of writing quills.—*Med. Jahr. des Oester Staats.*

LXVIII. EXAMPLE OF THE PURULENT DIATHESIS, WITH AN ERUPTION OF ECTHYMA CACHECTICUM.

A man aged 40, was admitted into the wards of the La Charité Hospital, under the care of M. Rayer, for what was considered a slight rheumatic affection.

By his own account, he had been ill only for a few days, and all that he complained of was flying pains in the right arm, especially about the elbow. His case attracted little notice, till an abscess formed immediately above the joint; there was little or no pain, but only a redness and fulness of the part, which became gradually softer and softer to the touch. At the same time the constitutional symptoms experienced a most unfavourable change; extreme prostration, sunk features, weak tremulous pulse came on; and in two or three days the man was in the last stage of a most malignant typhoid collapse. An eruption of livid papules, or hardened bases had appeared on different parts of the surface; and here and there were puffy swellings, which had proceeded to suppuration. On the neck and upper part of the chest, there were numerous large pimples, or little tumors of different sizes, from that of a pea to that of a nut, all tending slowly to the formation of pus at their summits. The patient died in a state of muttering delirium.

Dissection. In various parts of the body, especially in the substance of the muscles, abscesses were found; the largest of these were about the size of a pigeon's egg. In other parts they were more superficial, being situated immediately under the integuments. On cutting through the muscles of the right leg, an immense purulent deposit was discovered; the tibialis anticus was reduced to shreds and the bone laid bare. A similar abscess, but not so extensive, existed in the corresponding part of the left leg, and in addition to numerous superficial abscesses, several were found imbedded in the tissue of the gastrocnemii. The shoulder, elbow, wrist, hip, knee, and ankle-joints were all affected; the synovia had become thick, turbid, and of a greenish-yellow colour, and was much increased in quantity. No traces of phlebitis were discovered anywhere. One small abscess was found in the right lung; the heart healthy and likewise the abdominal viscera, with the exception of the spleen, which was much enlarged, and so softened as to be easily lacerable.

Observations. The preceding case bears considerable analogy to the worst examples of phlebitis, and the late M. Dance, in an excellent memoir published in the 18th vol. of the Archives Générales, has the merit of first directing our attention to the resemblance. In a patient in whom numerous abscesses had formed in different parts of the body, and a cachectic ecthymatous eruption also had existed, he found upon dissection abscesses in the muscles of the extremities, vomicæ in the lungs, and the left jugular, portal, and hepatic veins much inflamed. Whether the purulent deposits are dependent upon or are merely co-existent with the phlebitis in such cases, is a question of much pathological interest, and awaits future researches for its solution. The case which we have detailed is indeed hostile to the hypothesis; for not only the veins in the immediate neighbourhood of the abscesses, but also the splanchnic veins were most carefully examined, but no trace of phlebitis was to be found.—*Archives Générales.*

LXIX. Case, in which several Biliary Calculi were discharged outwardly from an Abscess.

A man, aged 48, applied at the La Charité for advice, respecting a swelling which made its appearance several months before, at the lower edge of the false ribs on the right side. It was accompanied with constant severe pain; but there was neither vomiting, nor any symptom of jaundice; diarrhœa had occurred at intervals. The swelling, at first very painful and hard, became gradually softer; an eschar was formed by rubbing caustic potass on its surface; and when this separated, a considerable quantity of reddish purulent matter escaped. The pains however did not abate. This state of things continued for upwards of five months, the purulent discharge going on all this time, when the patient felt as if some rough or pointed body was irritating the wound in the side. One of his companions drew it away by means of scissars; and after its removal, a copi-

ous flow of pus followed, with great relief to the pain and general distress. On the recurrence of these, he applied at La Charité, and now it was ascertained that the substance which had been withdrawn, was a biliary calculus; it was of the size of a pea. Upon probing the wound, the point of the stylet came in contact with something hard, rough, and moveable; when extracted, it proved to be another biliary calculus. Fortunately the constitutional disturbance was not great; there was considerable emaciation, but the appetite was good, the bowels regular and healthy, and the pus from the wound laudable.

During the subsequent week, several calculi was discharged, and the patient improved in every respect. Cases similar to the one now reported have been recorded by various authors, as Petit, Sœmmering, Cheselden, &c. &c. Those who are interested to know the particulars are referred to the paper in the March number of the *Archiv. Générales.*

LXX. TREATMENT OF HOOPING COUGH AND MEASLES.

A very fatal epidemic of these diseases lately prevailed at the same time in Bischwiller and the environs. A vast number of children died. M. Luroth, having been foiled with the treatment ordinarily used, had recourse to frictions with strong tartar-emetic ointment rubbed on the chest and epigastrium; the result was most gratifying, and could not possibly be mistaken. The ointment consisted of a drachm and a half, and sometimes two drachms and a half of the salt mixed with an ounce of lard; the strength of it was proportioned to the age of the young patients; the strongest ointment was applied to all children above two years of age; half a drachm was rubbed in twice a day, till a copious eruption of large painful pustules was brought out, and the eruption was kept up for a few days by an occasional application. In thirty-eight cases occurring in children from the age of one to fourteen years, thirty-four were speedily cured by antimonial frictions, combined with emetics and emollients. The space of time varied from six to twenty-four days;—the average was twelve days. The failure which has not unfrequently attended the employment of this ointment in the hands of others, the author attributes to the insufficiency of its strength, and to want of perseverance in its use, without considering it an infallible or specific remedy against hooping cough, and the pulmonary complications which so often accompany measles, he regards it at least as by far the most certain means of cure. The sympathetic eruption on the organs of generation was observed several times. —*Gazette Medicale.*

LXXI. TREATMENT OF A GOITRE BY SETON.

In a late case at the Hôtel Dieu, Dupuytren established a free suppuration by means of a seton over the tumor. In three weeks the size of it was reduced by two-thirds, and a complete cure was speedily anticipated.—*Lancette Française.*

LXXII. LECTURES ON THE CHOLERA, DELIVERED AT THE COLLEGE OF FRANCE. By Professor MAJENDIE. Octavo, Paris.

The following analysis of the leading phenomena observed in the cold or blue stage of cholera is given by this able physiologist and physician, as leading us to what he considers to be the correct view of the cause or rationale of the disease. First of all occurs the suspension of the circulation; then come the cramps and convulsions, and, lastly, the profuse vomiting and diarrhœa:—Such are the essential and pathognomonic symptoms of the disease; and, by attending to the succession of these, we may explain all the other "epiphenomena," or accessory symptoms. Well, the first link of the chain, our author tells us, is the stoppage of the circulation; this is the fundamental doctrine of his theory—the starting point for all future enquiries. The

cause of this stoppage, he says, is a weakening or paralysis of the ventricles of the heart; the piston ceases to act, and the blood stands still. That the blue colour of the skin is owing to this "stasis" of the blood, is incontrovertibly proved by the results of experiments, in which the heart's actions can be arrested, and we may then, at will, increase or diminish the cyanosis, by permitting or interrupting the communication of the heart's impulse with the remote venous ramifications. We need no other argument, to be satisfied that the blue stage of cholera is to be attributed to a simple stasis of the blood, and has nothing to do with inflammation.

But the mere arrest of the circulation will not explain some of the other phenomena of this most anomalous and puzzling disease; for upon what principle are we to account for the muscles retaining their contractility, the glands, as the mammæ, for example, continuing to secrete, and the mind preserving its powers unaffected? M. Majendie is fully aware of the difficulty of solving the problem, and candidly confesses his inability to do so. By careful auscultatory examinations, he has satisfied himself that the severity of the symptoms is always proportionate to the feebleness of the heart's actions, and that these become actually extinct in the very worst cases. The rice-water evacuations are directly derived, he says, from the mesenteric arteries and veins, and, in confirmation of this opinion, he has adduced some experiments, in which he forcibly injected watery fluids into these vessels, and found the intestines filled with a discharge, very like to what we observe in fatal cases of the disease; these evacuations are, therefore, to be regarded as consisting of the serous portion of the blood, blended with the mucous secretions. Every thing demonstrates that they are not the product of irritative or of inflammatory action. Having satisfied himself that the blood in cholera undergoes serious changes, that it loses a large portion of its serum and of its saline constituents, and becomes a viscid homogeneous, syrup-like fluid, M. Majendie was induced to try the effect of injecting into the veins an artificial serum, warmed to the heat of the body; in only one case, however, was this method successful in restoring the patient from the collapse, and the restoration, unfortunately, was only temporary, for in a few hours she again sunk, and died. In short, we must not allow ourselves to believe that it is merely the want of the serum which characterizes cholera blood; other changes have taken place in it, some appreciable, and others not so, and, till we have been taught a more perfect animal chemistry, we fear that any hopes of curing the disease by injections into the veins are fond and fallacious. The author was anxious to ascertain the effects of cholera blood, introduced into the circulation of a healthy animal: small quantities, he found, did not create much disturbance; but, when the quantity amounted to eight ounces for a moderate-sized dog, the animal speedily died, with symptoms much resembling those of cholera. It is unnecessary to say any thing of Majendie's treatment—it is well known, and is quite as inefficacious as any other.

LXXIII. Academy of Medicine.

(Continued.)

Séance of April 16th.

Diptherite—Tracheotomy.

M. Collineau regards this malady as dependent upon a general, and not upon merely a local affection; it is a disease of the whole system, and not of one part of it. In evidence of this, he points to the well-known fact, that the throat, pharynx, œsophagus, nasal passages, Eustachian tube, larynx, and bronchi, are all either simultaneously or successively attacked, and coated with the morbid secretion. If, therefore, the disease be systemic, how can we expect to oppose it by local applications or by tracheotomy? The alleged success of this operation he considers to be quite illusory; for some cases have terminated favourably of themselves, where little or nothing had been done

by art. The only indication for its performance is when all general means have failed, and the patient is threatened with suffocation—

"Melius, remedium anceps, quam nullum."

M. Velpeau advocates the doctrines and defends the practice of M. Bretonneau, who has had by far the most extensive practice in diptheritis, and who, be it remembered, does not recommend tracheotomy except in the last extremity, when there is great danger of asphyxia. The chief object which he has in view by its performance, is the instillation of the solution of the nitras argenti, in order to promote the detachment of the false membranes, and to excite their expulsion from the air-passages.

A NEW TALIACOTIAN OR PLASTIC METHOD OF TREATING LARYNGO-PHARYNGEAL FISTULÆ.

M. Velpeau recommends a modification of the plan which has hitherto been usually adopted, to retain the raw surfaces in apposition. The irritation of the twisted suture is apt to induce an erysipelas round the wound, and the constant dribbling of the saliva between its lips retards, or may quite prevent, the process of union. Having detached the tegumentary flap, and adjusted it nicely to the fistula, whose edges have been previously made raw, he passes across from left to right a long needle through the lips of the wound, and through the whole breadth of the "bouton" or fleshy plug, thus securing it steadily in the wound; a stitch or two of the simple suture at the apex and root of the flap, are also in some cases necessary.

M. Velpeau has tried the above method in two cases, with perfect success; and is, therefore, induced to recommend it, in preference to all others, in Taliacotian operations, when it is found difficult to retain the plug and the wound closely together.

CURIOUS MONSTROSITY.

M. Roux related the particulars of a person, who is truly of no visible sex at all. The individual passes for a woman; but there is neither a penis nor a vagina, uterus nor mammæ. The general aspect is certainly more feminine than male; but this is all that can be said.

This person is at present living in Paris.

LXXIV. ACADEMY OF SCIENCES. *(Continued.)*

Séance of 1st April.

GERMINATION.

MM. Edwards and Becquerel read memoirs on some of the products of the germination of seeds. Their experiments were carried on quite apart from and unknown to, each other, and we may, therefore, be less scrupulous in admitting the correctness of their results. Both ascertained that acetic acid is generated during germination and that this evolution goes on for some time after the escape of the radicle and plumule, and as long as the cotyledons continue to exercise any function.

Séance of 15th.

MORAL STATISTICS OF FRANCE.

M. Guerry, an advocate, has recently published an essay on this subject. Among other topics treated of is that of suicide. It appears that the number of felones de se, from the year 1827 to 1830, committed in France amounts to 6,900, or rather that 6,900 have been registered. The actual number is therefore, probably much greater, and exceeds, in the proportion of three to one, the number of murders and assassinations of the lives of others.

The frequency of the crime of self-destruction appears to be very different in different divisions of the kingdom for out of a hundred cases, 51 were committed in the region of the North 11 in the South; 16 in the East; 13 in the West; and 9 in the central division. In the department of the Seine alone, one-sixth of the whole number takes place, being one in every 3,600 inhabitants; but it is proper to state at the same time, that the greater number

of suicides is among the strangers and not the permanent residents in the metropolis; thus, in a hundred cases recorded as having occurred in the region of the North: 21 have been among visitants from the East division; 16 from the South; 7 from the West; 5 from the centre; and therefore only 50, or one-half of the whole number among the permanent resident inhabitants. Still it is a very instructive feature of the researches of M. Guerry, that from whatever point in France we start, we shall find that the proportional frequency of the crime increases, as we approach to Paris. The same remark is applicable to Marseilles, as we may consider that town as the capital of the South. The very reverse holds true of murders and assassinations, which are therefore, proportionally to the number of inhabitants, more numerous, where suicides are the least so.

Circulation of the Blood.

Dr. Tanchose, in a letter which was read at the Academy, threw out some very ingenious conjectures on the probable agency of a well known law of hydraulics, as a co-operating power along with the contractions of the heart, and perhaps also of the arteries and veins, in sustaining the beautiful mechanism of the circulation.

He supposes that there is constantly and everywhere, but especially in the capillary vessels, a tendency to the formation of a vacuum, induced by the ceaseless withdrawal of some of the constituents of the blood for the purposes of secretion, &c. &c. and that, as a matter of course, there is a steady and uniform afflux or suction of the moving fluid, to all parts of the body. We know that the circulation and the secretions are much accelerated by the rarifaction of the air; the effects of an ordinary cupping-glass are seen every day; and it is well established, that upon any rapid ascent into a thinner atmosphere, hæmorrhages from different parts, especially from the lungs, are by no means unfrequent. Excessive heat produces nearly the same effects; and an opposite state, namely, of cold, and of augmented gravity of the superincumbent air, always retards, and may even quite arrest the circulation and the different secretions. Again, if any part is more than ordinarily excited, a greater quantity of blood is drawn to that part; but it is not the heart, which in this instance, first begins to beat more strongly; the local afflux has already taken place, and the increased action of the heart is consecutive; if the excitement now cease suddenly, the heart still continues for some time after to beat more forcibly and quickly, and regains its tranquil state only gradually, and in proportion as the blood flows back from the part, whither it had been attracted. These facts may be well observed in the effects upon the circulation in the lower extremities, during and after walking; the action of the muscles causes a greater flow of blood, and no doubt a larger expenditure of it.

They are also illustrated by the phenomena of a topical inflammation or phlegmon; the blood-vessels in and around the part are beating strongly and frequently; and the heart becomes affected only when the irritation becomes general.

If the preceding views be correct we cannot fail to be struck with the analogy which will thus exist between the circulation of the blood in animals, and of the sap in vegetables.

M. Isidore Geoffroy St. Hilaire was elected a Member of the Institute in the Section of Anatomy and Zoology. The death of Latreille had occasioned the vacancy.

Organs of Circulation in the Crocodile.

M. Geoffroy St. Hilaire read a report on the very admirable "tableau," entitled "circulation of the blood in the human fœtus compared with the circulation in the four classes of vertebrated animals," which was recently presented by M. Martin Saint Ange to the Academy of Sciences. At present we shall confine ourselves to one topic only, that of the organs of circulation in the crocodile. Before the researches of M. St. Ange, it was believed that the heart

of this gigantic lizard was provided with but one ventricle, divided indeed into three compartments, having numerous orifices in their partitions, and receiving the blood from the right and left auricles, as in the tortoise, where also valves are placed to prevent its return; and that from these different compartments, three great arteries issued, viz. the right and left aorta, and the pulmonary artery.

Now, all this description is ascertained to be erroneous, for the heart of the crocodile most closely resembles that of a mammal; it has two auricles, and two ventricles, and between these cavities there are distinct and perfect septa. So far the resemblance is complete; but upon examining the organs still further, we find that a large artery springs from the right ventricle, at the side of the pulmonary trunk, and communicates by a very short anastomosis, with a branch proceeding from the left ventricle; thus a mixture of the blood from the two sides is effected, but not until the ascending trunks which supply the head are given off; pure arterial blood is therefore sent to the brain, organs of sense, &c. and mixed blood to all the other organs of the body. This discovery of M. St. Ange is most interesting in various points of view, but in none more so than as it most beautifully and unexpectedly illustrates the science of "teratology," or of monstrosities. The eminent English anatomist, Cowper, has recorded the following observations. In the bodies of two young children he found that the aorta, after having formed its arch, and given off the subclavians and carotids, was reduced to an exceedingly small size, nay even partially obliterated, until it was joined by a large branch from the pulmonary trunk; this monstral, or abnormal condition in man, is therefore the normal condition in the crocodile. Before M. St. Ange's discovery, the preceding cases of Cowper were the only examples of anomalies in the vascular system of man which had not their repetition or type in the regular or healthy state of some of the lower animals. That principle, or axiom of philosophical anatomy, that all the "vitia" of the conformation and of the arrangement of the circulatory apparatus in man and in the higher animals are analogous to the normal structure of beings placed lower in the Zoological series, is thus surprisingly confirmed. To compensate for the deficiency of arterialised blood in those parts, which are situated posterior to the heart, or nearer to the tail of the animal, there is a beautiful mechanism, the discovery of which is due to M.M. St. Ange and the younger St. Hilaire. They found a set of tubes, which, opening outwardly close to the recto-sexual passages, penetrate directly into the cavity of the peritoneum; by means of these, air or aerated water may enter and come into contact with certain congeries of blood-vessels in the abdomen; thereby oxygenating their contents, in the same manner as the blood in the bronchial vessels of fishes is arterialised. A subsidiary or local respiration is thus established; and that too, be it remembered, in a part of the body where very important functions, as those of generation, &c. have their seat. These trachea or spiracula have received from the discoverers the name of "peritoneal canals." They have been found also in the testudinata; and are either "aquiferous" or "aeriferous," according to the medium in which the animals live. Analogous, although considerably modified, passages exist in some of the higher animals, as for example, in the monotremata and marsupiata.

The distinguished reporter anticipates from the discovery some highly important and curious results in the field of philosophical zoology.

III.

Clinical Review and Hospital Reports.

1. Report of Cases treated in the Surgical Wards. By John Stirling, Surgeon to the Royal Infirmary, &c. Two Quarterly Reports.*

[Glasgow Royal Infirmary.]

Reports of surgical practice are furnished with more regularity by the surgeons of the Glasgow Royal Infirmary, than by those of any other institution with which we are acquainted. We have, on many occasions, had the pleasure of noticing them in terms of commendation, and if any remarks of ours have contributed to their steady publication, we need scarcely say that we must experience a high degree of satisfaction. We have dwelt so often and so long on the benefits that must accrue to science by a steady and well regulated system of clinical reports, that we will not take up our readers' time by reiterating our arguments, our expostulations, or our advice. If hospital surgeons and physicians will not engage in an extensive system of hospital reporting it is no fault of ours, and we venture to observe, that they ill consult their own best interests by holding back.

As an encouragement to those who do communicate to the public the results of their hospital experience, and as a record of the valuable facts that are related, scanty and imperfect as they are at present, we have resolved to dedicate a considerable portion of our Periscope to hospital reports. We trust that we shall find ere long, a growing inclination to meet the popular demand, and that metropolitan physicians and surgeons will follow the example that has been set them in the provinces, and the distant departments of the empire. To our provincial brethren we have little to say. The zeal, perseverance, and talent now displayed by them, render exhortation almost unnecessary. We trust that they will continue to exert themselves; we trust that by their book societies and associations they will cultivate still further a taste for medical literature, and that by publishing Transactions and Hospital Reports, they will in turn enrich that literature and improve their science. In proportion as they become more generally intelligent, they will demand more unanimously and effectually better institutions, and with better institutions still further improvements will come. Great as has been the progress of the profession within the last half century, we do not doubt that it will continue to advance, and that medical men will occupy a higher and a prouder station in society. But all substantial benefit must be founded on increased knowledge, and this can only result from its free and wide circulation. To this point therefore we return, that those who have opportunities of studying nature on an extensive scale are bound by a regard for science, and by a true acquaintance with their own interests, to communicate their experience to their less fortunate brethren. The periodical press must be their engine. We pass to the consideration of the cases before us.

Case 1.—*Foreign Body in the Trachea—Tracheotomy—Death.*

E. B. æt. 7, admitted March 15th, 1832.

Two hours previous to his admission a small pebble, which he had in his mouth, slipped into his throat; immediately afterwards he was seized with a paroxysm of dyspnœa, amounting almost to suffocation. On admission the respiration was quick but tolerably free—short abrupt cough—on slightly compressing the trachea immediately below the cricoid cartilage, and desiring him to cough, a sharp impulse communicated to the finger, as if some foreign body were impelled against it. Previously to admission a probang had been introduced into the stomach. Ow-

* Glasgow Journal, Nos. I. and II. Vol. I. New Series.

ing to a difference of opinion in consultation, nothing was done till the next day, when the operation of tracheotomy was performed.

An incision was made through integuments, commencing at lower margin of thyroid cartilage, and carried downwards to the extent of an inch. The muscles of the windpipe were large, and the struggles of the boy rendered the operation somewhat difficult. The cricoid cartilage and two rings of the trachea were divided, a small portion of the latter being cut out. By this means a very free opening was made into windpipe. A small artery was divided, and bled freely; a quantity of the blood having entered the trachea, produced some degree of convulsive coughing, which, however, was not followed by the discharge of the foreign body. On introducing a curved probe into the opening, and desiring the boy to cough, the pebble could be felt distinctly impelled against the instrument; but it never ascended so high as the artificial opening. Several unsuccessful attemps were made to get hold of it; it was therefore deemed expedient to remove the boy to bed, and to trust to time for the expulsion of the stone.

In the evening, he had fever and severe pain in the right side of the chest, increased on inspiration or coughing. Six ounces of blood were taken from the arm, with immediate relief. In the afternoon of the 17th, a violent fit of coughing came on, and a small white pebble, of a rounded form and polished surface, was expelled. The edges of the wound were now brought together with adhesive plaster. The throat was slightly painful; there was cough, mucous râle in the upper part of the chest, and pyrexia. *Cal.* gr. ij. *4tis horis. V.S. ad* ℥vj. *if cough or pain urgent.*

"18th. About six o'clock last night, was seized with a violent paroxysm of dyspnœa. Dressings removed from artificial opening, and double-curved wire introduced, after which he breathed easily and expectorated a quantity of mucus. Complained at that time of pain in situation of glottis, aggravated by lateral pressure. No stool from calomel; a dose of senna was given, and six leeches applied to lower part o neck. Slept well, and had no retur of dyspnœa until this morning, whe breathing became again difficult, bu was immediately relieved by the re moval of a quantity of mucus whic had collected around the artificial open ing. At present breathes easy, an has no pain in chest or upper part o throat. Edges of opening slightl swollen and coated over with lymph skin warm and moist. Bowels freel opened. Pulse immediately before vi sit 120, at present 140.—*Calomel to b continued, and leeches repeated if neces sary.*"

On the 19th he was relieved, but ha some tenderness in the region of th glottis. There was a croupy soun on coughing. The edges of the woun were again brought together. A cough mixture prescribed. He continued t improve till the 21st, when he had a fit of dyspnœa, with livid countenance The artificial aperture was re-opened and mucus expelled, with great relief In the evening he was still better. The mouth was affected by the calomel. On the morning of the 23d, after a severe fit of coughing, he became insensible, with contracted pupils, &c. Notwithstanding the usual means were adopted, he died in the forenoon of the 24th.

CASE 2.—*Tumour in the Neck—Laryngotomy—Death.*

David Clarke, æt. 19, admitted June 12th, 1832.

Occupying nearly whole of right lateral region of neck is a large pretty firm tumour, somewhat of a triangular shape, the base extending from middle of body of lower jaw to a point two inches behind ear, and the sides converging from each end of this line to the apex, situated at posterior border of sterno-mastoid muscle, about two inches above clavicle. Tumour is not very moveable, and it seems to dip deeply behind angle of jaw, and to be in some degree attached to it. On opening the mouth, the soft palate is seen thrust forward apparently by some part of the tumour. It is very tender to pressure, but most painful on inside

of right ear, the pain shooting up to vertex of head. Deglutition is in some degree impeded, but respiration little affected. Two months ago tumour commenced as a small hard swelling at right side of thyroid cartilage, which has gradually increased in size since that time. General health good, but pulse very irregular.

Blisters were applied without benefit. The tumour continued to increase slowly, and, at 10, p. m. of the 24th, he was seized with suffocative dyspnœa. An incision was made into the tumour, below the lobe of the ear, where it felt boggy. No relief was obtained, and another incision was made below the angle of the jaw; a little blood only escaped. The larynx was then opened between the thyroid and cricoid cartilage, and the edges of the opening kept asunder by a double-bent wire. Some blood getting into the trachea occasioned suffocative cough, but the hæmorrhage ceased spontaneously.

Iodine was given without benefit; the dyspnœa was sometimes better, sometimes worse. An incision was made over the base of the jaw, and a few drops of ill-conditioned pus escaped; the artificial wound was kept open. On the 5th, there was a paroxysm threatening suffocation. A canula, two inches in length, was several times introduced through the wound, but always produced suffocative cough. A tube three-fourths of an inch was tried, but, from its shortness, this was constantly thrown out. A long tube was, therefore, again tried, and, after violent struggling, the patient was able to retain it, and breathed easily. On the 17th he had again an attack of dyspnœa, and on the 22d he died.

On inspection, the heart was found much enlarged and the lungs full of tubercles, some of them suppurating. The tumour appeared to have been originally an enlargement of the right side of the thyroid gland, and was different in structure from any Mr. Stirling has met with. The opening in the larynx was free.

CASE 3.—*Wound of Throat—Pharynx opened—Recovery.*

Robert M'Farlane, æt. 54, admitted Dec. 25th, 1832, 7, p.m.

On the previous night he attempted suicide by cutting his throat with a razor. A considerable quantity of blood had been lost, and a vessel had been tied. On admission, the wound is found to be about three inches in length, and its edges are somewhat ragged and irregular. Centre of incision is at the space between the os hyoides and thyroid cartilage, and from thence it extends backwards and obliquely upwards on each side, to within a small distance of the margin of sterno-mastoid muscle. At its centre the incision penetrates very deeply, and lays freely open the pharynx, but becomes more superficial towards each extremity. Is able to articulate pretty well, and can also swallow fluids, although with some difficulty. Has a frequent troublesome cough, with which he was afflicted some time previous to infliction of injury. General health seems good. Pulse 84, of tolerable strength. Tongue white. Bowels slow. *Two stitches, with adhesive plaster and bandage. Cough mixture—anodyne.*

On the 26th, every attempt to swallow liquids produced convulsive cough, and only a very small quantity could be got down. *A pint of beef-tea introduced through the œsophagus tube every six hours.* On the 27th the dressings were removed. No adhesion had taken place. On any attempt to swallow, a severe paroxysm of coughing was induced, and the fluid was ejected at the wound in the throat. The tube could be introduced with facility, and with very little irritation, into the stomach. The symptoms were in all respects favourable. The edges of the wound were again approximated—attempts at swallowing prohibited—and beef-tea introduced through the tube, as before. On the 30th, there was some inflammation of the skin of the anterior part of the neck and superior part of the thorax. *Twelve leeches—two ounces of mag. sulph. injected into stomach.* Next day there was still much tumefaction, and, on removing dressings, a very large coagulum was withdrawn from the wound. Nothing untoward oc-

curred after this, and on February 8th, the patient was dismissed cured.

CASE 4. *Carcinoma of Rectum—Operation—Recovery.*

Alex. Campbell, æt. 28, admitted Nov. 14, 1832.

For nearly an inch round the verge of the anus was a circle of unhealthy looking ulceration, with high everted edges, and a rough callous surface, discharging copiously a thin unhealthy matter. On going to stool there was great pain and occasionally slight bleeding; when the fæces were liquid they passed out involuntarily. The general health was somewhat impaired. The disease had begun a year previously with what appeared to have been hæmorrhoidal tumors. These were excised by a surgeon, the wound did not heal, and the present sore was the consequence. A suppository and chlorine wash was tried without benefit, and the following operation was resorted to.

"The patient being placed in the ordinary posture for lithotomy, and the urine having been previously discharged, a sound was introduced into the bladder to elevate the prostate gland. An incision embracing diseased parts, and extending through skin and considerable part of cellular substance, was then made. Anteriorly the gut was separated from its surrounding connexions by cautious dissection; laterally and posteriorly the knife was passed up the depth of the disease, and its point made to penetrate the walls of the rectum. It was then carried round a considerable portion of the circumference of the gut, guided by the finger introduced into the rectum. The greater portion of the disease being thus removed, it was found that several parts of diseased intestine still remained behind. These were subsequently dissected out along with several glands, which lay internal to the skin, and were enlarged and indurated. Their cellular connexions being pretty strong, they were removed by the finger with some difficulty. Still more difficulty was found in removing some which were firmly adherent to the right lateral lobe of prostate gland. The diseased parts were in this manner removed as far as could be ascertained. The interior of the rectum felt smooth, and its wall soft and pliable. A considerable quantity of blood was lost during the operation, and this escaped from an infinity of small vessels, the greater number of which speedily retracted, a single vessel only requiring a ligature. At one time during the operation there was an approach to syncope, but the pulse never disappeared at the wrist. The cavity formed by excision of diseased parts was filled by several pieces of sponge, and a compress applied externally, supported by a T bandage."

In the night there was vomiting, relieved by effervescing draughts and the application of turpentine to the epigastrium. On the 10th the skin was hot, the pulse 144, but there were no other unpleasant symptoms. The sponge had distended the wound, to which it was adherent. Ordered, *castor oil—antimonial wine—oiled lint to wound.* On the 12th he was ordered quina and tincture of gentian; on the 14th a beef-steak and porter. On the 22d cicatrization was beginning to take place. During January he continued to improve, and the wound to contract, in consequence of which it was necessary to introduce a bougie frequently, to keep the rectum open. Early in February he had an attack of abdominal irritation, with rigor and pyrexia. It was subdued by leeches, laxatives, and effervescing draughts. At the date of report, January, 1833, the wound was nearly healed, but the bougie was still necessary to prevent undue contraction. The fæces could be retained except when very fluid, in which case a small quantity sometimes escaped involuntarily. His general health was tolerably good.

We are not convinced of the propriety of denominating this disease carcinoma. The patient was young, the history was not such as is usually obtained in cases of cancer of the rectum, nor was the situation the ordinary one for that malady. Mr. Stirling gives no account of the structure of the part removed, and we repeat that, taking all these circumstances into consideration, we do

not feel assured that the term carcinoma is correct. But if it be so, we need hardly observe, that the patient's permanent recovery is not certain. We must wait before we can pronounce on that point, and we trust that, as the operation of removing the lower portion of the rectum is now exciting interest among surgeons, Mr. Stirling will take some future opportunity of acquainting the readers of the Glasgow Journal with the result.

Mr. Stirling relates a case of what is denominated elephantiasis of the labium pudendi, of a female aged 24. The tumor had originated two years previously from a blow upon the part. It was removed by two semi-elliptical incisions, and there was a good deal of bleeding. The tumor weighed four pounds and seven ounces; it presented internally a gelatinous appearance, and contained a great quantity of serum. The operation was performed on the 15th July, and the patient was dismissed cured on the 9th August.

Injuries of the Head.

Case 1.—*Scalp-wound, "Arachnitis" —Recovery.*

R. A. æt. 9, admitted May 5, 1832, having received a violent blow on the back of the head with a bunch of keys, ten days previously.

There was a wound on the occiput half an inch in length; bare bone was felt with the probe. There was headache, which had existed since the blow, most severe in the forehead—sluggishness of pupils—occasional fits of sickness, followed by flushings and partial perspirations—heat of surface—pulse 130—tongue foul—bowels constipated. The treatment previously employed had been straps to the wound and purgatives. The treatment employed was shaving the scalp—leeches—a blister—and purgatives. On the 9th, the patient, not being much better, was ordered two grains of calomel and half a grain of opium night and morning. On the 21st the mouth was slightly affected with mercury. The headache had ceased—the scalp-wound was nearly well. There was, however, considerable œdema of the face, and a tendency to the same thing in the scrotum; pulse 120. He was bled to 6 ozs. and purged, and on the 31st the œdema was gone. He was then ordered quina, and on the 5th June dismissed cured.

We mention this case as illustrative of the good effects of mercury in the symptoms of membranous inflammation that follow injuries of the head. We do not think that it is employed so often or so early as it should be, for it not only exerts a power over those symptoms that mere depletion and purgation do not, but it also prevents the necessity of extreme depletion. We should rather be inclined to avoid the combination of opium with calomel in these cases.

Case 2. *Fracture of the Skull—Trephining—Dura Mater punctured—death.*

P. M. æt. 32, was picked up by the police in the streets, on the evening of the 9th July, 1832, and admitted on the 10th, at noon. No history could be obtained.

Insensibility. Respiration very laborious. Pupils fixed, that of right eye very much contracted, left considerably dilated. Pulse about 70, labouring. Heat of surface natural. Immediately over left lateral region of frontal bone, near to its junction with parietal, is a small triangular wound. Bone not denuded, and no fracture or depression apparent. Nearly in same situation on right side, there is considerable tumefaction, but no abrasion of surface. Face is much swollen, particularly about eyelids, which are of a dark livid colour. No particulars of the accident can be obtained, having been picked up by the police on the previous evening. He was immediately bled to 20 ozs. and had a common enema.

By advice of consultation, wound was enlarged by means of a crucial incision, and the angles being reflected back, a fracture was detected in parietal bone running along the superior boundary of the temporal fossa, and extending downwards upon that portion of the frontal bone which enters into the formation of that fossa. Little or no depression of the bone existed,

but a little blood oozed from the fracture. Trephine was applied so as to embrace a segment of both sides of fracture, by which a circular piece of bone was removed. The dura mater was found detached to a considerable extent from the skull, more particularly in the direction of the orbit, and when separated from the bone by the intervention of any instrument, a considerable quantity of fluid blood escaped. To facilitate its exit, a triangular piece of bone was removed by means of Hey's saw; the base of the triangle corresponded to the opening made by the removal of the circular portion, and one of its sides to the fracture; the apex projected downwards into the temporal fossa. On removal of this portion, more blood escaped. On pressing upon the dura mater, fluctuation was distinctly felt. An opening of about half an inch in length was made, and a quantity of serum spouted out, at first clear and nearly colourless, but afterwards mixed with red particles of blood. No coagula escaped. Patient was evidently much relieved. Respiration, from being stertorous, became easy and natural. The edges of wound were loosely approximated, he was removed to bed, and cold water directed to be applied to head, and a turpentine enema administered.

At 7, p. m., he was worse—skin hot—pulse 168; considerable discharge from the wound, flowing evidently from anterior part of cranium. He was bled to ten ounces. He died at 10, p. m.

On examination, sanguineous effusion on the upper and lateral surface of right hemisphere, with slight effusion below arachnoid. Great effusion at basis—veins distended—quantity of serum in lateral ventricles. The fracture began at the anterior inferior part of left parietal bone, traversed the orbital process of the frontal and the æthmoid, and involved slightly the right orbital process of the frontal, as well as the body and wings of the sphenoid. The dura mater was not lacerated.

This case shews how futile is the precept, that in concussion the pupil is affected one way and in compression another. In this case one pupil was contracted, the other dilated, although there was such extensive compression.

CASE 3. *Compound Fracture of the Skull—Operation—Death.*

A. S., æt. 30, admitted Jan. 10th, 1833, at 1, p. m., having been thrown among stones, in the morning, whilst riding at full gallop. He was said to have vomited some blood. Insensible—breathing somewhat stertorous—pupil of right eye dilated, of left contracted, of both insensible to light—pulse 64, feeble—extremities cold. Above right eye-brow a transverse wound, about three inches in length, extending down to the bone, and a fracture with depression.

Wound of forehead was enlarged, and another incision made at right angles with the former, and carried upwards for the space of an inch. The two angular flaps thus formed, were dissected upwards, and a portion of bone exposed. Crown of trephine was applied over upper margin of fracture, so as to embrace depressed bone. Circular portion being removed, two or three irregular spiculæ were extracted. Taken collectively, these formed a triangle, the sides of which did not exceed three-fourths of an inch. Another portion, about half an inch in length and three lines in breadth was slightly depressed. This portion was elevated to the level of surrounding bone, and allowed to remain. Dura mater was found entire, but separated from the bone to a considerable extent, and a probe could be easily introduced as far as orbitar process of frontal bone. A small quantity of fluid blood issued from the opening. Flaps were brought together and held in contact by plaster and light dressings.

At 7, p. m., he seemed more sensible, and moved the left arm freely—dilatation of right pupil less perceptible—both contracting sluggishly on the approach of light. He had repeatedly vomited grumous blood since the operation. No stool—pulse 66.—*Turpentine enema.*

Next morning the sensibility seemed yet farther increased—both pupils more natural—no attempt to move the right

arm, but both lower extremities equally drawn up. No more vomiting—no discharge of urine—pulse 60. Between two and three pints of urine were drawn off by the catheter. In the afternoon the lips of the wound, being adherent, were separated by the probe, and a small quantity of blood escaped. *Cold lotion and turpentine enema.* On the 12th there was rather less sensibility—great difficulty of swallowing and occasional hiccup—urine only voided by catheter—pulse 68, stronger. *Hirud.* xx. *temp. Vesic. capiti—Enema.* On the 13th the pulse was 84, softer. *Hirud.* xij. *temp. Cal.* gr. ij. *2ndis horis.* In the evening the pulse becoming stronger, he was bled to two pints, when it rose from 84 to 132, and became soft. Next morning he was rather more sensible—left angle of mouth rather retracted—catheter still necessary—pulse 124—edges of wound apart, and a small quantity of pus discharged from it. He was again leeched, after which he grew more sensible and spoke. On the 15th he was less sensible and more feeble—skin cold—pulse 120.—*Half an ounce of brandy every two hours, till the pulse becomes firmer—beef-tea.* On the 16th the mouth was affected and he had purging. On the 17th he died.

On removing the scalp, the space in the skull from which circle of bone had been removed, was found filled with purulent matter. On removing scull-cap, the surface of the dura mater was found natural in appearance, with the exception of that portion above which the trephine had been applied, which was covered with a layer of coagulable lymph, seemingly organized. On raising dura mater a very extensive extravasation of blood was found to have taken place upon the surface of the brain, particularly on the posterior and opposite surface from that which was nearest the fracture. The extravasation was also very copious at the base of the brain. The fracture extended down the frontal bone, and across the orbitar process, in the direction of, and ending seemingly at the base of the crista galli.

Our readers are aware that the surgical treatment of compound fracture of the cranium has of late years attracted considerable attention. Sir Astley Cooper and Mr. Brodie are advocates of immediate trephining in this accident, whilst others oppose the practice, and consider that the immediate application of the trephine is not more necessary in this than in other injuries of the head, or in cases of simple fracture. It is obvious that such a question can only be decided by facts, and therefore we have noticed all the cases of compound fracture of the skull that have met our eye in the periodical or in other publications.

It is obvious that in the preceding case the operation could not prevent, nor was it likely to cause the fatal termination. The operation is resorted to on the principle that portions of bone pressing on or penetrating the dura mater, are more calculated to irritate and produce inflammation of that membrane, than if the depressed portions be raised or removed. But this patient died from the extent of the extravasation and consequent injury to the brain.

Excision of the Elbow-Joint.

Two cases of excision of this articulation are to be found in the reports before us. We have remarked on a previous occasion, (we allude to our review of Mr. Syme's work, upon Excision,) that it cannot fail to strike the practical reader, how frequently excision of the elbow-joint has been performed, and how rarely amputation for disease of that joint is witnessed. If excision be a substitute for amputation, it follows of course that either excision is performed too often, or amputation not often enough. We must confess that we should feel extremely loth to amputate for disease of the articulation of the elbow, the patient getting off, in the majority of cases, with a stiff-joint. The advocates of excision may reply, that if their operation was resorted to the patient would have an useful instead of a stiff-joint. To this we can only say, that it is not certain which is the better of the two, an elbow-joint anchylosed at a convenient angle, and a strong limb, or a sort of articulation

and a weak limb. Then there are undoubtedly some risks run in the operation of excision, although they are neither numerous nor formidable. The question can only be decided by facts. We will give as succinct an account as possible of those before us.

Case 1. F. D. æt. 11, of strumous constitution, admitted June 24th, 1832. Left elbow-joint much swollen—sinuous openings, leading to roughened bone—integuments around them livid—little pain—motions limited. Firm swelling on the dorsum of the foot, chiefly over the third metatarsal bone—a sinuous opening, tending towards this bone, which is not felt bare. Appetite defective—slight cough—occasional night-sweats—pulse 120—bowels irregular. The disease of the elbow joint had begun three months previously—disease of the foot subsequently to the former. He was ordered quina, with acid, and a beef-steak for dinner.

On the 19th, the operation of excision was performed. We need not describe the steps of the operation, so many descriptions of it having lately been given. The lower end of the humerus and the upper ends of the radius and ulna having been removed, all the diseased bone appeared to have been taken away, with the exception of a very small part of the posterior aspect of the ulna. Nothing untoward occurred during the progress of the operation, or afterwards. About the middle of January he had a febrile attack, followed by pain, swelling, and discharge on the dorsum of the foot. On examining the wound there, the middle and external cuneiform bones were found rough, and the probe could be passed into their articulation with the navicular bone. Only one point of the arm remained unhealed, and that was superficial, but several small sores had appeared on the site of the former cicatrices. Under salines, with a recurrence to wine, &c. on the subsidence of pyrexia, the patient again improved, and was "dismissed cured" on the 4th March.

We should have liked a little more specification in the account of the termination of this case. We are t nothing of the nature of the false a culation or the anchylosis—nothing the powers of the limb—nothing of state of the foot. And we would dr attention to the latter point. Th was disease of the cuneiform bon and of their articulation with the na cular, and yet, under proper gene treatment, the boy is described as be cured. Why not have tried a simi plan in the instance of the elbow-joi In our English hospitals we Southro do this—we apply splints and give nics, and send the patients to the s side; nor are the results of our tre ment discouraging. But in Scotla excision is performed.

Case 2. J. A. æt. 29, admitted Se 20th, 1832. There is considerable s elastic swelling round left elbow-joi extending slightly up arm, and do over upper third of fore-arm. Ha good deal of pain on pressure over co dyles of humerus, but more over he of radius. Motions of joint are limi and painful, it admits of very little fl ion, and he cannot supinate hand. D not complain of much pain on appro mation of articular surfaces. At in aspect of fore-arm, a little below joi swelling is slightly pointed, and see to communicate a feeling of fluctuati A sinus which existed at inner side arm has been closed for some da General health pretty good—pulse i pid—night-sweats formerly, but n now. The disease is of two yea standing, and originated after expos to cold. The pain and swelling we aggravated by an injury, and the ma pulations of a bone-setter four mont ago. On the 23d, a probe, introduc into the opening above the elbow-joi detected bare bone. He was ordered blister, quina, and beef-steaks. Su puration occurred, and increased ab the joint, and two free openings we made. The general health became i paired, and, on the 14th Oct. excisi was performed. The disease "appea ed to be confined to the surface of t bones invested with cartilage." On t next day he had cough—some fever tongue dry and red. We need not gi

the particulars of the after-symptoms or after-treatment, suffice it to say, the thoracic affection increased, and the patient died on the 22d of November.

On examination, the pleuræ were found united by old adhesions—the lungs studded with tubercles in their various stages, and presenting cavities in the superior lobes. The state of the arm is not mentioned.

This was obviously a case of ulceration of the cartilages, originating in rheumatic inflammation, and very different from the case preceding it. The treatment, both of the disease of the articulation and of the phthisis, appears to us to have been rather too stimulating.

Some cases of other affections are related, but we must here conclude this notice. We have no doubt whatever, that the practice of the Infirmary will continue to be laid before the public by the able and zealous surgeons.

II. Birmingham Infirmary for Diseases of the Eye.

A report of this institution, from March 1st to December 31st, 1832, has been published by Mr. Middlemore, assistant surgeon to the Infirmary, in the Provincial Transactions. The following statement of the gross number treated is useful, as affording a rough estimate of the relative frequency of various affections of the eye at Birmingham. The strumous affections will be found, as might be anticipated, to preponderate.

Simple acute conjunctivitis, 186. Chronic conjunctivitis, 79. Acute conjunctivitis, with pustules on the conjunctiva, 90. *(a)* Acute conjunctivitis, with pustule or ulcer of the cornea, 129. Acute conjunctivitis, with puriform secretion, 61. Purulent conjunctivitis of newly-born infants, 32. Irritable conjunctivitis, 24. Strumous conjunctivitis, 53. Pterygium, 5. Corneitis, 12. Vascularity of the cornea, 20. Opacity of the cornea, 99. *(b)* Conical cornea, 3. Staphyloma of the cornea, 13. Impaction of foreign bodies in the cornea, 13. Simple acute sclerotitis, 7. Rheumatic sclerotitis, 11. Staphyloma of the sclerotica, 3. Affections of the membrane of the aqueous humour, 10. Simple acute iritis, with or without ulcer or opacity of the cornea, onyx, or hypopion, 59. Chronic iritis, 16. Syphilitic iritis, 4. *(c)* Strumous iritis, 8. Prolapse of the iris, 8. Fungus from the iris, 5. Cataract, 17. Dislocation of the lens, 4. Choroiditis, 4. Retinitis, 3. Glaucoma, 5. *(d)* Hydrophthalmia, 2. *(e)* Amaurosis of various kinds and degrees, 63. Diseases of the lachrymal passages, 29. Epiphora, 7. Strabismus, 14. Tinea, 103. Lippitudo, 14. Hordeolum, 5. Ectropium, 2. Entropium, 7. Inflammation of the eyelids, 19. Œdema of the eyelids, 5. Nævus of the eye-lid, 3. Ptosis, 3. Adhesion of the eyelid to the globe, 4. Tumours in the eyelids, 11. Suppuration of the eye-ball, 7. Fungus of the eye-ball, 2. Wound of the eye-ball and its appendages, 31. Disease of the bones of the orbit of various kinds, 2.

We fear that these muster-rolls are seldom accurate, being often confided to pupils who are not the best judges of some of the affections of the eye. We feel surprised that there occurred only twelve cases of corneitis, which, in London, is certainly a more frequent affection.

Small-pox Pustule of the Cornea.

Mr. Middlemore remarks, that scarcely a week elapses in which he does not see one or more children whose vision has been more or less injured by small-pox. Children affected with small-pox are liable to the formation of a pustule in the cornea, which may accompany the development of the small-pox pustule in the skin, or in the mucous membrane, or may occur as the symptoms of the disease are subsiding in the cutaneous texture. Mr. M., therefore, recommends a careful attention to the state of the eye during the existence of small-pox, especially its earlier stages; for though it frequently happens that there is merely conjunctivitis, the disease

of which mention has been made may take place. But to describe this affection:

It appears that the pustule forms, and is first witnessed, in the conjunctival covering of the cornea, and is then evinced as a small cloudy spot; the cornea becomes extensively inflamed; its interlamellar spaces are occupied by a rather glutinous matter. This matter is secreted in large quantity, and constitutes a densely opaque circular spot, of a greater or less extent; its pressure produces the absorption of the proper lamellar texture of the cornea, which, already weakened by the existence of inflammation, yields; and, in severe cases, the cornea ulcerates, and staphyloma is produced.

Mr. M. is in the habit of dropping the vinum opii into the eyes as soon as the pustule or pustules appear, and he thinks that this prevents the full development of the pustule.

CONICAL CORNEA.

A young woman was sent to Mr. Middlemore with this distressing complaint. The right eye was perfectly healthy in appearance, and was *not* myopic. The cornea of the left eye was most beautifully transparent, and the projecting part of it had a dazzling crystalline appearance; its summit was slightly flattened, and apparently attenuated, but not at all opaque. The sight of this eye had gradually become dim and dazzling; when she looked with it alone, objects appeared multiplied. She had scarcely any pain or uneasiness of the globe. She had suffered for some time from a vesicular eruption on various parts of the body, but otherwise she was in health. She had never suffered from severe inflammation, or any injury of the eye, but she had done a good deal of fine sewing by candlelight.

The treatment adopted is the application of a blister twice a week, either to the temple, or above the eye-brow of the affected side—to use a weak solution of the nitrate of silver every other evening—to be careful in diet and regulate the bowels, and to rest the eye as much as possible.

Mr. M. observes that he has tried in one instance, and unsuccessfully, the plan recommended by Mr. Guthrie viz. the exhibition of emetics and purgatives. He intends to give it a further trial, but he questions the propriety of exhibiting emetics in an advanced stage of the disease, where the cornea appears about to give way. He has found the introduction of a seton in the temple capable of arresting the disease in some instances.

QUINA IN STRUMOUS AFFECTIONS OF THE EYE.

"I first pointed out, in the 'Midland Reporter,' the utility of the sulphate of quina in some cases of strumous inflammation of the cornea, the iris, and the membrane of the aqueous humour, occurring in connexion with certain constitutional symptoms. Soon after my remarks upon this subject appeared, the readers of the Medical Gazette were informed, by an anonymous writer, that the practice so advised had been previously suggested by Mr. Mackenzie, which, however, was not the fact. I have to repeat my thorough conviction of the propriety of the practice I formerly recommended, a conviction which subsequent experience has only tended to augment, although Mr. Guthrie, or one of his pupils, has stated (in the last number of the Medico-Chirurgical Review), in particular reference to my practice in such cases that the adoption of similar measures has not been attended with much advantage at the Westminster Ophthalmic Infirmary. I have, however, in my possession, the voluntary testimony of many surgeons, in support of the paramount efficacy of the sulphate of quina, when suitably administered in judiciously selected cases of scrofulous inflammation of the cornea, the iris and the membrane of the aqueous humour; and I mention this fact merely to justify the urgency of my recommendation of a practice, which I was the first to propose and adopt, as

which has been singularly successful under the observation of those who are far more competent than I am, to ascertain and determine its merits."

To this we can only reply, that facts are facts. We do not doubt Mr. Middlemore's word, but we do not find that strumous ophthalmia is cured in London by quina, as Mr. Middlemore seems to cure it at Birmingham. Undoubtedly quina or tonics of any sort, and especially steel and sarsaparilla, to which quina is not to be compared, are useful in strumous affections of the eye as in strumous affections of other parts. But they must be given on general principles, that is, the same principles must regulate their employment in this as in other strumous complaints, and we firmly believe that they are not one whit more efficacious in one than in the other, in short, that quina has no specific or peculiar powers in strumous affections of the eye.

Hydrophthalmia.

Sarah Miller had dropsy of the eye, apparently dependent on an increase both of the aqueous and vitreous humors. Various medicines and applications had been employed in vain. As there were great pain and tension of the globe, Mr. M. punctured the cornea, but with only temporary advantage. Mr. M. therefore removed a portion of cornea at its centre, about equal in size to the plane surface of a split-pea. The aqueous humor and lens were immediately forcibly injected through the opening, and the pain was at once relieved. After the wound had healed the pain returned in a slight degree, and Mr. M. fears that it will be necessary to repeat the operation. Mr. M. makes the following observations on the treatment of this complaint.

"I was aware, in this instance, of the great advantage of removing a large portion of the cornea, but I was also conscious of the objections to this more extensive operation. Sometimes the removal of a small portion of the cornea, (Celsus says, "*ad lenticulæ magnitudinem,*") is sufficient to cure the disease, and it is desirable to try its effect, at least, for I have known the extensive excision of the front part of the eye, when it has been much enlarged from hydrophthalmia, followed by very severe symptoms. The excision of the cornea merely destroys a portion of the secreting surface, yet, notwithstanding, it is often succeeded by a cure of the disease, (in as far as preventing the painful distention of the globe can be termed a cure) although the septa of the hyaloid membrane still continue, and retain, as I presume, their secreting power.

In recommending this operation, I am, of course, supposing cases in which the disease cannot be cured by the abstraction of blood, by the use of counter-irritation, and by the administration of medicines. The occurrence of dropsy of the eye-ball, in connexion with dropsy in other parts of the body, is so exceedingly rare, that many of the oldest and most experienced practitioners in this town, have assured me they have never seen the two diseases co-existent.

It will be understood that I do not recommend the excision of the cornea, until the effect of tapping the eye has been ascertained; but where that surgical measure has been fruitlessly adopted on several occasions, I should certainly think it preferable to remove a portion of the cornea, rather than tap the eye, as is sometimes done forty or fifty times, at occasional intervals.

After the cornea has been removed, the new matter which is deposited from its incised edges, is sometimes projected forward by the contents of the globe; this occurrence takes place before it has acquired sufficient firmness to resist the pressure from within. The result of this projection of the matter of reparation is, frequently, the production of large staphyloma; with a view of preventing this untoward occurrence, I have recommended that, as soon as the central portion of the cornea (which should be oblong in the lateral direction,) is excised, its divided edges should be brought together by means of a fine suture, which should not be removed until the parts are pretty firmly united, which may be expected to take place in

four or five days. This practice has been successfully adopted, at my suggestion, upon the eye of a gentleman, who was affected with large staphyloma corneæ, and whose engagements would not allow him to remain at Birmingham, under my own care, whilst the operation for its cure was performed, and for a proper period afterwards."

STRYCHNIA IN AMAUROSIS.

The present report concludes with some remarks on this head, and a case in illustration. Mr. M. observes that he has observed that, "although the propriety and great advantages of this practice are manifest and pretty generally acknowledged, many medical men appear strangely reluctant to adopt this mode of cure." We fear that the latter part of the sentence is more strictly accurate than the former; the reluctance is undoubted, the advantages of the method not so manifest nor so generally acknowledged as Mr. Middlemore believes. We have seen the strychnia tried in several cases of amaurosis, and we must candidly own that it did no good, at all events no permanent good in any. They were cases to which the treatment seemed applicable, but it failed. On the other hand, the strychnia produced unpleasant symptoms in two or three instances. We have heard professional men make similar remarks, and although we know that the practice has been tried in several institutions, and that every disposition existed to try it fairly and with a leaning in its favour, yet now it is seldom had recourse to, a pretty satisfactory proof that it has not answered. Mr. Middlemore, in reply, may appeal to his cases. As many or more have been brought forward in favour of the strychnine practice in general palsy, but what experienced physician has now much confidence in that practice, or rather has not an apprehension of it. Few will accuse us of being advocates of things that be because they are, or of old prejudices because they are old. But we cannot, as practical men, shut our eyes to the truth, that the flashy recommendations of new medicines have ended for the most part in complete disappointment. We do not hesitate to say that of late years our progress has not been in this direction, or effected by these means. Our substantial advancement has been through the medium of the facts of morbid anatomy, giving us a clearer insight into the nature of disease, and enabling us to determine with more precision what diseases are essentially structural and what are not. We have attained a more exact diagnosis, and have consequently applied with more precision and certainty the ordinary principles of treatment. Such we believe will be the acknowledgment of those whose experience has been sufficient to sober their views and their expectations.

We would not be unjust to Mr. Middlemore, nor have we any wish to dogmatise. Our opinion is, after all, but the opinion of an individual, and Mr. Middlemore may be right. We will give the case which he relates.

E. H., æt. 35, was so affected with amaurosis that he could only distinguish suddenly and extremely varying degrees of light. The eyes were dark coloured, the pupils large, the iris healthy but sluggish. He had worked, as a smith, nearly all his life at a bright fire. He was pale, by no means robust, and in a pretty good state of health. Having cleared out the bowels by a brisk purgative, Mr. M. placed a blister over each eye-brow, and sprinkled daily on the raw surface of each a sixth of a grain of strychnia, gradually increasing the quantity to two grains. In the course of a few weeks vision was "very much improved," but he became tired, and entered again on the infirmary books. The treatment was of no service to him, but he could see tolerably well for one or two hours during the day, and could find his way about the streets, without being led by his child as formerly. He now again employed the strychnia, and his sight underwent a marked and progressive amendment, but not being able to support the painfulness of the treatment, he again discontinued his attendance. He afterwards went to the hospital, where he remained for about six weeks, but de-

rived no benefit. His sight is now sufficiently restored to enable him to follow the coarser parts of his business. Mr. Middlemore observes that this is "a result of the application of the strychnia."

III. Bristol Infirmary.

Case of Osteo-Sarcoma, in which considerable Portions of the Upper and Lower Jaw, were removed.

This case is related in the Provincial Transactions by Mr. Hetling, the operator. As it is a matter of the highest importance that the profession should be as well acquainted as possible with the results of great operations, we shall lay the case before our readers.

Case. Margaret Hunt, æt. 23, sallow, of scrofulous habit and feeble intellect, was admitted into the Bristol Infirmary, Jan. 27, 1831, with a large tumour on the left side of the face. The tumour extended over both jaws, elevated the integuments of the cheek, and partly protruded between the lips at the angle of the mouth. On examining the interior of the mouth with the finger, it was ascertained that the tumour originated in the superior maxillary bone—that it had extended backwards into the palatine portion of the mouth—and was pressed forwards and downwards on the lower jaw by the action of the cheek, producing extensive absorption of that bone—that the alveolar border and processes of both jaws were nearly all removed from that side of the face—that in the upper jaw there was not a tooth left, and in the lower only a few, loose and buried in the medullary matter of the tumour. The tumour having insinuated itself between the jaws of course prevented the closure of the mouth; the cheek was not adherent to the surface of the tumour, circumstances so far favourable to an operation. The tumour was about the size of a large orange. Externally it felt firm from the extension of the cheek; internally, of the consistence of brain. The glands of the neck were free from the disease. The patient could not masticate and could scarcely articulate; she was compelled to live upon fluids, and even these were swallowed with difficulty.

The friends stated that the girl had always been of a weakly constitution—that the swelling had commenced from exposure to cold, when she was between eleven and twelve years of age—that the swelling had been gradual in its increase, attended with pain and a fetid discharge—and that latterly there had been frequent and copious bleedings from the mouth. Nothing of any consequence had ever been done for the complaint.

In consultation it was determined to remove the tumour, and to destroy, if possible, the surface of bone from which it originated. A few days previous to the operation Mr. Hetling took away the remaining teeth. He determined *not* to commence by tying the carotid.

"Feb. 16.—The patient was laid horizontally on the table, on the right side, the head moderately elevated on a firm pillow, so as to place the cheek in the most favourable position for *the operation*. Two fingers were introduced at the angle of the mouth, between the tumour and the cheek, in the direction of the articulation; the integuments were then freely slit up between them to the lobe of the ear; another incision was then carried from the infra-orbitary ridge across the centre of the first incision, down to the angle of the lower jaw. It was here necessary to tie some branches of the facial artery, which bled rather freely. The flaps of the crucial incision were then reflected, which fully exposed the external and irregular lobulated surface of the tumour, and afforded, also, the opportunity of tracing its base and attachments. The base of the tumour was found to occupy the palatine and maxillary portion of the upper jaw, and in its extensive growth its head had been forced down and attached to the ridge of the lower jaw, nearly as far as the symphysis, extending along the whole of the alveolar border nearly in a horizontal line from the mental foramen to

the condyloid process, the whole of which portion was discovered to be either absorbed or in a state of caries from the long-continued pressure of the tumour. In fact, the tumour had so worked its way across the lower jaw, both inwards and outwards, that it was found buried in its substance, and, consequently, absorption of its body had been going on for some time, on both sides of the bone. The substance of the tumour was next separated by the knife and fingers, from its base and adhesions; this occupied a considerable time, in consequence of its various sinuations, as it had penetrated in every direction where it could find access. When this was effected, an extensive irregular surface of bone was found in a state of caries, extending, in the upper jaw, from the pharynx across the palate to the malar bone. Not the least vestige of the thin walls of the antrum remained. Fortunately the floor of the orbit was left uninjured. With the assistance of Liston's bone-cutter, small saws, &c. every portion of diseased bone was taken away that could be safely removed, and the general surface scraped, as carefully as possible, with the knife, it being intended, finally, to apply the actual cautery over the whole plane of the diseased bone. Having accomplished this tedious and difficult part of the operation, ample room was found for amputating the lower jaw at the articulation; caries having extended, as before stated, from near the symphysis along the whole of the upper margin to the joint. This extensive line of bone was then sawed off, except the condyloid process, which was afterwards easily disarticulated, and removed with Liston's bone-cutter, having first divided the fore part of its capsule, and also the temporal muscle from the coronoid process. This important and generally intricate part of the operation, was facilitated by the previous removal of all the teeth and alveolar processes."

The operation occupied about three quarters of an hour, and in consequence of the exhausted state of the patient, the actual cautery was not employed. The flaps of the cheek were brought into apposition by three sutures, adhesive straps, and a light bandage. On the fourth day the dressings were removed; the external incision had completely united with very little deformity. In a fortnight the dressings were discontinued, and the patient able to walk about the ward convalescent. In the course of a month she masticated as well as usual with the other side of her mouth, from which there was then no discharge. On the 5th April, seven weeks after the operation, she was dismissed apparently cured.

On examination of the tumor, its lobulated shape was in a great degree destroyed, in consequence of laceration with the finger in the operation. Its substance throughout possessed the common homogeneous structure of medullary matter. On cutting it into slices, a few blood-vessels were divided, from the orifices of which a little blood oozed out. In fact this was a case of medullary sarcoma.

It might be thought by some of our readers that this was a splendid instance of the powers of operative surgery. Now mark the result.

Some time after the patient left the infirmary the disease reappeared. She could not be prevailed upon to return to the hospital, and, after languishing for about a twelvemonth, she died.

We wish all narrators of operations were as anxious to ascertain results and as punctual in publishing them as Mr. Hetling. We should not then have so much to induce the profession to admire and practise operations for the extirpation of malignant tumors. When we see how seldom even amputation of a limb in which there is a fungoid tumor, of a breast or of a testicle affected with the disease, when we see in fact how seldom complete extirpation of the part is successful, we have little reason to expect that the mere dissecting away of such a tumor from the jaw, even though the actual cautery be subsequently liberally employed, will be unattended with failure. In a report from St. George's Hospital, a little farther on, our readers will find two other cases of malignant disease of the jaw, in which operations have been unsuccessfully performed.

IV. Liverpool North Dispensary.

Case of Melanosis.

So few circumstantial details of this singular form of malignant disease are presented to the public, that we are readily induced to draw attention to the following. It is narrated in the volume of Transactions to which we have already on several occasions referred, by Dr. Williams, Physician to the Liverpool North Dispensary, in which the patient was.

Case. John Thomas, a coal miner, healthy and sober, had on his right shoulder, near the base of the scapula, a purple or dark brown spot, a nævus, in short, about the size of a section of a pea. In 1826, he being then about 29 years of age, this spot was observed to increase. In March, 1827, the excrescence was as large as a marble, and was then frequently hurt in following his occupation. In December, a dark-coloured speck was observed in a line between the angle of the left side of the inferior maxillary bone and the left nostril; and, in a few days more, a similar one was noticed near the base of the right side of the lower-jaw. In 4 months or so after this, both specks began to spread, and others made their appearance from time to time on various parts of the body. In February, 1828, the excrescence on the back, which had assumed the mushroom form, began to discharge spontaneously and unceasingly a sanguineous fluid from its surface, which seemed excoriated. In April and May the excrescence was partially destroyed by caustic, but this did not stop its growth, though it did temporarily arrest the discharge, which, however, began anew in October, and in a few weeks became so troublesome that he left off work altogether. Soon after Christmas he went into the Manchester Infirmary, for the purpose of having the excrescence on the back removed, which was done by means of the ligature. The wound quickly healed. His health was now impaired. In a few days after his discharge from the Manchester Infirmary, he went to Liverpool, and on the 24th April, 1829, was admitted a patient of the Liverpool North Dispensary, for pain in the left side without cough. This was removed, and the patient now coming under Dr. Williams' observation, he carefully observed and has as carefully related the characters and progress of the melanotic affection.

At this time the melanotic depositions were pretty general on the surface of the body, but more especially on the scalp, face, and arms. They were characterized by the appearance of blackish specks, and of slightly elevated, flattish, globular, and conical-formed tubercles, with smooth shining surfaces, and of various sizes.

The blackish specks were found to be the initial forms of the sensibly raised spots, or flattish tubercles. These specks, when first visible to the eye, appeared to be deposited immediately under the cuticle, as if each one of them had occupied a pore of the skin. They spread themselves in a somewhat circular form, as if the natural tissue had been infiltrated with the melanose matter. No thickening of the part, occupied by these specks, could be appreciated before they had attained the diameter of at least three or four lines, but after attaining this growth, they, by degrees, put on the tubercular character, becoming hard, sensibly elevated, and their edges terminating, more or less, abruptly: a flattish tubercle on the forehead was elevated a line and a half, or two lines, above the adjacent parts. These tubercles were indolent, and spread slowly; they neither ulcerated nor softened, having, apparently, no natural termination, and when punctured, nothing seemingly escaped but a few drops of blood. None of these flattish tubercles were softened.

"The globular tubercles, in their initial state, presented themselves in small hard roundish tumours, which were evidently deeper seated than the initial specks of the flattish tubercles; for the former could be felt before they could be seen, whereas the latter could be seen before they could be felt. These roundish tumours, generally, were developed either in the cutis vera, or in the cellular membrane attached to its

under surface, for they remained fixed and immoveable in one situation; a few however, from changing their situation, were evidently developed in the deeper-seated subcutaneous cellular substance. No discolouration of the integuments marked the site of any of the tumours, until they approximated the surface, so as to be pretty prominent; then their respective apices assumed a blackish hue (three or four had a sort of reddish yellow cast), and a smooth shining surface. These globular tubercles were indolent, insensible, and of a slow growth. The sizes which they individually attained were various, from that of a marrowfat pea to that of a pigeon's egg; some exceeding the latter size, and a few, in their progress, assumed the ovoid, or, rather, the teat-like form, and rose from half an inch, to an inch and a half above the adjacent surface. These globular and ovoid tubercles, when first developed, felt consistent and solid; afterwards this character was changed for that of fluidity.* These tubercles softened at all sizes. While on the increase they retained their primary hardness, but, as soon as they softened, they ceased to grow. As the teat-like tubercles, and the globular ones that were fairly developed above the surface of the skin, softened, they lost their smooth shining appearance, and shrivelled. This change took place from their contents being partially absorbed, or exuded, imperceptibly. I think the fluid was exuded, as scales were constantly peeling off their surfaces, but none peeled off the tubercles that retained their hardness; though the subcutaneous globular tubercles softened, yet no diminution took place in their bulk, which would have been the case, had their contents been absorbed. On puncturing the softened tubercles, black-coloured matter escaped."

Both kinds of tubercles continued to increase in number, until at last they occupied every part of the surface of the body except the penis, scrotum, and the ears. The colour, generally, was a mixture of the blackish purple with the blueish black. One subcutaneous tumour exhibited a blueish-grey tint. This tumour attained the size of a hen's egg. As the disease advanced, the skin in the interstices, between the tubercles, became gradually darker and darker, and a fortnight before the patient's death, his visage darkened very rapidly. Just before his death, the skin had all the appearance of being infiltrated with the melanose matter.

The cicatrix on the back continued sound till the beginning of August, when a blackish tumor sprang up from its centre, as did another from the surface of a flattish tubercle, situated a little below the cicatrization. These tumours were indolent, assumed as they grew the mushroom form, and discharged from their surfaces a thin, sanguineous fluid.

The effects on the general health may be shortly stated as the following. A pleuritic attack, which has been mentioned, and one on a previous occasion. After the pleuritic attack, a degree of debility, without sensible emaciation or apparent ill-health. Early in June, headache, which ever afterwards troubled him—for the last two months of his existence, to such an extent as to produce stupor. From the beginning of August, his health gave way rapidly; he lost flesh; his secretions became depraved; his urine was high-coloured, scanty, and deposited a sort of coffee-ground sediment, but was neither acid nor albuminous. The perspiration had a peculiarly rank smell, and, towards the latter end of his life, it was colliquative. A few weeks before his dissolution, his debility and emaciation were extreme, and for some days before his death, on the 15th Nov. 1829, he was comatose.

About the latter end of August, a tumour, that in time discharged a brownish-coloured fluid developed itself in the left antrum maxillare.

Towards the middle of October, a tu-

* "This circumstance favou the opinion entertained by M. Laennec and Mr. Fawdington, namely, that Melanosis has two stages, the first a stage of crudity, the second of *ramollissement*."

mour was developed in the epigastric region, rapidly extended to both the hypochondria, and finally attained an enormous size.

Unfortunately permission to examine the body could not be obtained.

It would be impertinent in us to point out in what particulars this disease resembled, and in what it differed from, medullary sarcoma. It is evident that the patient died of visceral disease, and it is probable that the latter was either melanoid or fungoid. The headaches and final coma make it probable, also, that similar disease attacked the encephalon or its envelopes, as occasionally happens in cases of medullary sarcoma. The profession are indebted to Dr. Williams for the minute description of the progress of the melanoid tubercles which he has presented.

V. Bridgewater Infirmary.

Fixing the Scapula in Cases of Dislocation.

Mr. Toogood, senior surgeon of the Infirmary, has made some remarks on this subject. Mr. T. appears to be a man of few words, and whether his observations be or be not too good, they are certainly too short. To compress them, would be putting a flea in a rack. In cases of dislocation of the humerus, Mr. Toogood thinks that sufficient attention is not paid to fixing the scapula, and for many years past he has adopted a very simple method, which has never failed. It is this.

Having seated the patient on a low chair or stool, firmly secured the body and fixed the pulley, I stand over him, and place the heel of my right hand on the acromion, leaning my weight on my hand: by this means the scapula is fixed and rendered immoveable, the extension is then made, and the reduction quickly completed.

VI. Rathkeale Dispensary.

Dr. Patterson has published, in the eighth Number of our esteemed Dublin contemporary, some "Observations in Dispensary Practice," some of which we will advert to. The first are on the—

Asphyxia of New-born Children.

On this head, we beg to direct attention to the remarks of M. Cruveilhier, an account of which is to be found in the Review department of our present No. The object of Dr. Patterson is to suggest the employment of cold affusion in these cases, and he cites two in support of the recommendation.

Case 1. "Mary O'Brien of Rathkeale, aged 24, in June, 1831, was seized with premature labour of her first child. She stated, she had only reached the commencement of the eighth month of gestation, and attributed her impending abortion to fright. Her pains being slow, after about thirty hours of lingering labour, she was delivered of a still male infant. Immediately on the protrusion of the fœtus, a very languid circulation was perceptible in the funis, and a slight motion of the limbs was observed. Previous to the division of the cord, it was attempted to excite respiration; but the funicular pulse having quickly ceased, the child was removed and subjected to artificial inflation, friction, external warmth, and nasal irritation. There being no appearance of benefit, and ten minutes having been lost in these fruitless attempts, I placed the infant in a tub, and twice dashed over it three quarts of water, the temperature of which was about sixty degrees. On the first dash, a slight convulsive motion of the body was sensibly excited; after the second, the heart and lungs were in evident action, but this was exceedingly weak and tremulous. While the babe was allowed to remain for a few moments in the water, which scarcely reached its ears, the thoracic parietes were subjected to strong friction. In effecting this, the integuments were made to glide, to and fro, over the ribs, so as to excite titillation. Movements of the arms and legs, and active respiration having quickly succeeded, the

child was removed from the vessel, well dried, and wrapt up in flannel. It slowly acquired strength and activity, but ultimately, became remarkable for its large size and healthy appearance."

In the second case, there was no appearance of life, yet vitality could not have been long extinct. The funicular connexion was, therefore, speedily separated, and immediate recourse had to cold affusion. At first a momentary shuddering was observed, and, in the next instant, the heart's action was comparatively vigorous. The child recovered, and both are now living.

HEMERALOPIA.

This disease is not very unfrequent in the Doctor's part of Ireland, and it has appeared to him that it has arisen from visceral derangement, and not from solar or other external influence.

Case. James Dwyer, aged 19 years, applied at the Rathkeale Infirmary, the 9th September, 1831. He complained that every evening at dusk, he became almost blind, and continued so till sunrise next morning; that he could see very imperfectly by fire or candle light, and that exposure to heat and active exercise, or labour, always considerably aggravated his inability to discern objects at night. He stated, that in candle light, however vivid, he could distinguish no object that was directly opposite to him. He could see a little in an oblique direction, and this enabled him, with much difficulty, to grope his way. The pupils were permanently and very much dilated. 'He felt stupid and confused in his head.' There was great fulness, hardness, and some tenderness of the right hypochondrium; conjunctiva yellowish; alvine evacuations white. Early in May, 1831, he was attacked with jaundice. He did not get rid of it for a month, and while labouring under the disease, he first noticed the derangement of sight. This continued, with only daily intermissions, up to the period of his application.

Having been bled, blistered, and purged, with little effect, he was directed to rub in one drachm of strong mercurial ointment every night, and as soon as this had affected the constitution, recourse was had to the nitro-muriatic acid bath. The moment the gums became tender, he experienced a manifest improvement of his sight. But at this time he complained, for a few days, that exposure to artificial light produced most unpleasant sensations in his eyes. Under the treatment, the hepatic disorder was quickly and effectually relieved, and with it the amaurotic affection entirely disappeared

Two other cases are related; but symptoms nearly similar were relieved by a nearly similar treatment. In all the cases there was, or there had been, jaundice, and, in several, the nitro-muriatic acid bath was sufficient, without mercurial action, to produce a permanent cure. In every case of jaundice, Dr. Patterson has observed a tendency to hemeralopia. We fear that, if the bent of an enquirer's mind were towards the existence of this affection, he could easily, by the questions he put, obtain from an amaurotic patient a sort of history of hemeralopia.

IODINE FOR CARIES OF THE VERTEBRÆ.

The benefits of iodine seem something like the philosopher's stone—ever on the point of being discovered, and ever evading the searcher. We have daily accounts of the virtues of this substance—we hear that it is useful in bronchocele, in malignant tumours, in scrofula, in secondary venereal symptoms; yet, somehow or other, it has so happened that we have rarely seen it of much service in any of these affections. Still we must report the powers it possesses in the hands of others, and we hope that our readers will find them as great when invoked by themselves.

Dr. Patterson relates three cases of caries of the vertebræ, in which he employed iodine with much apparent effect, and he concludes by saying, that from the result of those cases, he has little doubt that iodine will be found a remedy no less efficacious in the treatment of this formidable disease than it has proved in bronchocele.

Case 1. In Aug. 1831, Dr. P. found J. Moran, æt. 14, an out-patient of the dispensary, suffering under extensive disease of the dorsal vertebræ, the three middle bones of which were principally engaged. He was unable to walk, and could only attain the semi-erect posture by grasping his hands with his thighs. The body of the sixth vertebra seemed totally destroyed, that of the fifth and seventh nearly so. There was unremitting and severe pain in the back. His countenance was pale, the body and limbs wasted, and there was troublesome diarrhœa, alternating with profuse night-sweats. Two issues, which had been open for nine months, existed on the back. On the 24th, having previously tried ineffectually quinine, cicuta, hyosciamus, Dr. P. ordered the lad five drops of the tincture of iodine every eight hours. On the 17th October, it is reported that all pain and uneasiness, save those resulting from the issues, had ceased; the issues were directed to be healed. On the 31st, Dr. P. saw him again. He had acquired flesh and the aspect of health, walked firmly without assistance, had experienced no pain since the removal of the issues, the diarrhœa and night sweats had ceased, and the functions were natural. Dr. P. has since heard that he enjoys good health.

Case 2. Mary G., æt. 26, became a patient, Nov. 12th, 1831. She principally complained of pain across the loins, where a slight projection of the spinous processes of the last dorsal and first and second lumbar vertebræ was observed; pressure here produced pain shooting down the right thigh. An abscess discharged profusely in the right groin—she had numbness and weakness of the inferior extremities—bad appetite—irregular hectic symptoms. She had been ailing for several months. Five drops of the tincture were given thrice daily, and the dose raised to ten drops, which were never exceeded. She improved rapidly in health, the inguinal discharge gradually ceased, and in three months her recovery was so complete that she discontinued the medicine.

Case 3. In July, 1832, Dr. P. was requested to visit Miss ——, æt. 14, of delicate appearance. Four or five years previously she had suffered from severe pain in the back with loss of power in the lower extremities, for which two issues were employed for twelve months, when the young lady was thought cured. She had remained well till the preceding April when she again began to suffer from pain in the back, her health suffered, she suffered from numbness and shooting pains in the thighs, and inability to direct the feet. On examining the back, the spinous processes of the four lower dorsal vertebræ were found to project about the fourth of an inch beyond their fellows, the projection not having the aspect of that produced by destruction of the bones. Pressure here occasioned much pain, felt chiefly in the situation of the eleventh and twelfth dorsal.

Tartar-emetic ointment was applied to each side of the spine, and tincture of iodine administered in five-drop doses every eight hours. In three weeks all pain of the back and extremities had ceased, but, a copious epistaxis occurring, the iodine was suspended. The hæmorrhage ceased, and in four or five days the vertebral pain was as bad as ever. The medicine was resumed, and the pains "almost immediately" disappeared, the health became greatly improved, and the young lady, now, Nov. 1832, walks erect with ease and firmness.

None of the preceding patients observed the horizontal position. We hope Dr. Patterson's sanguine anticipations may be realized, and that iodine may display some powers in cases of caries of the vertebræ. We are sorry to say that we have our doubts, for medicines that the profession find comparatively powerless have been ushered into notice with cases quite as striking as these.

VII. Bristol Infirmary.

How a Case of Inguinal Aneurism should not be reported.

There are two methods of conveying in-

formation; one is by setting a good example, the other by setting a decidedly bad one. Thus a pupil will frequently learn as much by witnessing a very bungling operation, as a very adroit one. A gentleman, who is too diffident to sign his name, has contrived to make a most instructive report in the Lancet for June 15th. We defy any surgeon, pupil, or apprentice to concoct one more calculated in every respect to shew what should be avoided. It is a model of deformity. We should be sorry that a specimen of such value should not be presented to our readers, and we hasten to transfer it to our pages for the purpose of pointing out its various excellencies.

"Residing in the neighbourhood of Bristol, and learning lately that there was a case of inguinal aneurism in the above institution, I requested permission to see the operation. It was granted immediately. We waited somewhat impatiently about an hour, when Mr. Richard Smith, the senior surgeon, came into the room and said, 'Gentlemen, I am sorry to inform you that I cannot persuade the man to submit to the operation, although he had distinctly consented to it; but if I can hereafter alter his resolution, I shall be happy to see you all again.' We departed, much disappointed. A week elapsed, and on the 21st we again assembled. In a few minutes the patient was brought in, seemingly care-worn and woe-begone. He was aged about 40, and dated his malady to a kick from a rioter, when the prison was burned in October, 1831, he being a turnkey.

The perforation in the artery was, probably, nearly about under the centre of Poupart's ligament, extending in a circle up the abdomen and down the thigh, about two inches and a half each way. It pulsated very strongly over the whole surface, and every stroke was visible in the gallery.

This unfavourable extension of the disease had rapidly increased during the week which had elapsed. It obliged Mr. Smith to begin his incision higher than is usual. The operator drew his scalpel at one sweep entirely through the integuments in a somewhat semi-lunar direction, making a wound about five inches long, and ending at the upper edge of the tumour. The external oblique was thus completely exposed. The fascia was next lightly cut through, and a director was passed down, upon which the muscle was slit to correspond with the external opening of the integuments. The operator now passed his left index from across, and entirely under, both the internal oblique and the transversalis, ran the back of a Pott's knife along his finger, divided the whole, and thus exposed a considerable surface of the white peritoneum. Laying aside his knife, the way was cleared with both hands down to the psoas muscle, and the operator began to search the cavity. One of the surgeons who was near, asked 'Do you feel the artery?' 'Yes, distinctly, and it is a good deal bound down, but I think I shall soon be able to detach it with my finger and thumb.' Presently Mr. Smith said, 'Now I have the artery over my finger.' 'Is it quite free?' 'Yes, there is nothing but the artery; I am quite sure of it; favour me with the blunt needle with the ligature.' The instrument broke from the handle, another was substituted, and the needle was passed very readily under the vessel. A surgeon pulled up the ligature with a dissecting forceps, and the needle was then withdrawn. The silk was now under the artery. The operator drew up the ends so as to bring the sides of the artery in contact. 'Gentlemen, will you satisfy yourselves that the circulation is commanded?' Three or four hands in succession were laid upon the tumour. 'Yes, the pulsation is gone—it is all right—the sooner you tie the better.' The ligature was then tightened, and the operation finished. The integuments were drawn together with adhesive plaster, a strip of lint and bandage were applied, and the patient was carried out. The operation occupied under ten minutes, and there was not a tablespoonful of blood spilled from first to last. After the first incision, the patient appeared scarcely to suffer at all. The operation gave universal satisfaction. It was performed with the utmost coolness, and in a surgeon-like manner. I have seen

Sir Astley Cooper perform the operation twice, and I have seen three other hospital surgeons perform it in London, but this operation in my judgment might dispute the palm with any of them. The utmost attention also was evinced by the other four surgeons, Messrs. Hetling, Lowe, Daniel, and N. Smith, and the duties of Mr. Morgan, the house-surgeon, were performed with promptness.

Five days have now elapsed, and I understand that the man has had not one unpleasant symptom; he has slept well; there has been no tension of the abdomen, the wound exhibits a mere line, the tumour sinks, and the limb is of a comfortable temperature. This case is the second of the kind which has occurred in the house.

Mr. Smith has been surgeon to the institution for nearly forty years."

For a fact to be well recorded two conditions are necessary; clearness and accuracy of description, and the exclusion of irrelevant particulars. When these conditions are observed, and a decent respect evinced for grammatical construction, a case may be considered as well reported. Let us see how this nameless gentleman succeeds. And first of his grammatical peculiarities. "The operator," says he, "now passed his left index *from across*, and entirely under both the internal oblique and the transversalis, ran the back of a Pott's knife along his finger, divided the whole and thus exposed a considerable surface of the white peritoneum." Setting aside the utter impossibility of understanding what is meant by passing an index from across and under a muscle, and the obliging manner in which the white peritoneum is introduced, in contradistinction we suppose to a peritoneum of some other colour, we beg to suggest, that if the ordinary principles of construction are to guide us in the perusal of medical reports, Mr. Smith divided his *finger*, as well as the patient's muscles, in the most gallant and unhesitating manner.

Let us look at the clearness of the descriptive portion of this interesting communication. "The perforation in the artery was, probably, nearly about the centre of Poupart's ligament, extending in a circle up the abdomen and down the thigh, about two inches and a half each way. It pulsated very strongly over the whole surface, and every stroke was visible in the gallery." This is certainly an extraordinary case, and any journal, weekly, monthly, or quarterly, would naturally be anxious to publish it. Think of a *perforation* of an artery extending in a *circle* up the abdomen and down the thigh, two inches and a half each way. But this is not all. This "down the middle and up again" perforation, pulsated, and every stroke (of the perforation) was visible in the gallery. What the gods must have thought of it we do not know, but we conceive that the reporter has very wisely put the whole affair as a probability only. To be sure there are difficulties even in admitting this, and we would suggest that the unsuspecting gentleman meant tumor, when he talked of perforation. We fear, however, that we must abandon this suggestion, as the very next sentence informs us that "this unfavourable *extension* of the disease had rapidly increased during the week which had elapsed," so that the perforation turns out after all to be an extension.

The description of the commencement of the operation reminds us of the manner in which Smollett makes Beau Didapper draw his hanger; but how Mr. Smith disposed his incision is, from the said description, a delightful mystery.

We have observed that one feature of a well-recorded fact is the absence of irrelevant circumstances. How well our reporter has displayed this is shewn in the anxious dialogue so dramatically related. We know of nothing possessed of such intense interest, with the exception perhaps of the duct between the sisters in a pathetic drama denominated Blue-beard, or Female Curiosity, or the dialogue between Beefington and Puddingfield, in Canning's Play of the Rovers, or the Double Arrangement.

"Yes, the pulsation is gone—it is all right—the sooner you tie the better."

"PUDDINGFIELD.—*(With extreme earnestness.)* Its name?

BEEFINGTON.—The Daily Advertiser.—

PUDDINGFIELD.—Oh ecstasy!

BEEFINGTON.—*(With a dignified severity.)*—Puddingfield calm yourself—repress those transports — remember that you are a man." &c. &c. &c.

There is one other circumstance worthy of remark in this report; it is the extreme good nature of the reporter. Every thing is praised—operator —assistants — house-surgeon, and all the inanimate things, gallery, museum, and so forth. It were much to be wished that more of this spirit existed, and we should not be deemed so pugnacious a profession.

Seriously, we have noticed this case because we think it disgraceful to the medical press to promulgate such crudities. Is it reduced to such a state that any communication, the most illiterate, is acceptable; or does it reserve its criticism for books, and display in such communications as these, all the vices of literary omission and commission, that it reprehends? We cannot believe this, and we do hope that the editors will exercise a more rigorous scrutiny into the matter and the manner of the articles they insert. Such a case as that we have now noticed can do no possible good to science or to any thing else, and can only bring periodical literature into contempt. It may readily be believed that we entertain no personal feeling in this case, being utterly ignorant of the name of the author.

VIII. COUNTY OF DUBLIN INFIRMARY.

MR. CRAMPTON ON THE PATHOLOGY OF DISLOCATION OF THE SHOULDER-JOINT.*

If there is any thing which has afforded us greater pleasure than the establishment of a Medical Journal in Dublin, it has been the distinguished manner in which that Journal has been conducted. For general soundness, acuteness, and manliness of criticism, it has not been excelled, and we feel delighted at meeting what we may, perhaps with some vanity, denominate, a worthy fellow-labourer in the field of criticism. The Dublin Journal and this Review stood alone in the exposure of the absurdities and fallacies of Dr. Stevens, and while our contemporary displayed the weakness of his chemical theories and experiments, we ridiculed the general tenor of the work. Both of us were exposed to some little obloquy at the time, but we venture to say, that there are few who now think of Dr. Stevens' saline treatment but as a folly past, if they think of it at all. The Quarterly Review, indeed, has thrown its mantle over him, but, like the mantles of the Senators on Romulus, it has crushed its wearer, and his spirit is gone from us, none know whither.

The Dublin Journal has been as distinguished in its original as in its critical department, and we have shaken hands with Crampton, and Stokes, and Graves, and others of the Lords of the Emerald Isle. Late, say we, may be the parting, as the greeting has been pleasant and hearty.

The object of the present article is to introduce to the notice of our readers some observations of Mr. Crampton's on Dislocation of the Shoulder-joint. Though not strictly a hospital report, it has so much of the clinical about it, so genuine a smack of the hospital still, that we cannot introduce it in a more appropriate place than this. Mr. Crampton will appreciate our feelings when we say, that we never see a bird of his rise from cover, so blithe and so strong on the wing, but we like to bring it down.

Mr. Crampton justly observes that though the *treatment* of dislocation of the shoulder-joint has engaged much attention, yet a rational method can be founded only on an exact knowledge of the pathology of the injury, which, unfortunately, has been but sparingly illustrated. It is Mr. Crampton's wish to add to this knowledge. At the time

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* Dublin Journal, Nos. VII. and VIII.

Mr. Hey wrote, Mr. Crampton is not aware of there being more than one case of dissection of a shoulder-joint recently dislocated, on record, that of Mr. Thompson's in the Medical Observations and Inquiries for 1761. Even in this case the description is confused, and the accompanying plate imperfect. The case, too, was not, strictly speaking, a recent one, eighteen days having elapsed between the reception of the injury and the examination of the joint after death. In Professor Bonn's monograph on Luxations of the Shoulder, the most recent case of which a dissection is given, is of two years' standing. This monograph was published in 1782. In Sir Astley Cooper's Treatise on Dislocations, we are presented with the post-mortem examination of two cases of recent dislocation of the humerus, both of which were instances of luxation "into the axilla."

In these cases we are told that, in the first, the capsular ligament was torn on the whole length of the inner side of the glenoid cavity, which (rent) would have admitted of a much larger body than the head of the os humeri through the opening. The tendon of the subscapularis muscle was also extensively torn, but the tubercle on which the supra and infra spinatus, and the teres minor muscles are inserted, was not, (as in Mr. Thompson's case,) torn off. In the second case, in which dislocation had existed (unreduced) for five weeks, the capsular ligament had given way in the axilla between the teres minor and subscapularis muscles, the tendon of the subscapularis was torn through, at its insertion, all the articular muscles, but particularly the supra-spinatus had been more or less lacerated, as it would seem, in the attempts which had been made at reduction. Sir A. Cooper found that "the resistance to reduction (even after death,) was such as he could not by himself overcome; he divided one muscle after another, cutting through the coraco brachialis, teres, major and minor supra-spinatus muscles, but still the opposition to his efforts remained; he next divided the deltoid muscle, and found that the supra-spinatus muscle was his great opponent, *until he drew the arm directly* upwards, when the head of the bone glided into the glenoid cavity."

To these cases Mr. Crampton is enabled to add two others which have fallen under his own observation: one of a recent dislocation downwards, and one of a recent dislocation under the pectoral muscle.

Case 1. In 1808, a labouring man was engaged in digging under the foundation of a house, when a wall fell upon him. He was brought into the County of Dublin Infirmary, in a dying state, in consequence of injury of the head. He lived only two hours. On examination of the body 18 hours after death, the right humerus was found to be dislocated into the axilla. Previous to reducing the dislocation Mr. C. made a careful dissection of the joint. The following were the appearances.

On removing the integuments of the axilla, the cellular membrane, which was extensively ecchymosed, formed a kind of cap, closely embracing the head of the os humeri, which when the axilla was cleared, was seen lodged on the inferior costa of the scapula, or rather on its neck; the head of the bone, in escaping from its socket, had pushed the teres minor downwards, and burst through the lower part of the subscapularis muscle, some of the fibres of which closely embraced the neck of the bone, while the bulk of the muscle was pushed upwards and detached from the inner surface of the scapula. The neck of the humerus, therefore, was in some degree embraced by the divided fibres of the subscapularis muscle, while a portion of its head rested on the neck and part of the venter of the scapula without the intervention of any muscular substance. The short head of the biceps and the coraco-brachialis were forced to describe a curve outwards over the neck of the humerus on the sternal side, while the long head of the triceps crossed the neck of the bone obliquely on the dorsal side; this strangulation of the head of the bone, by the surrounding muscles, was made most apparent when extension was applied to the fore-arm. The biceps and

triceps seemed then to close behind the head of the bone, and interpose themselves between it and the glenoid cavity; the tendon of the long head of the biceps remained in its groove, but the sheath in which it runs was partially ripped up.

The capsular ligament was completely torn from the lower part of the neck of the humerus to the extent of more than half its circumference, the torn edge appearing like a crest over the head of the bone. The great nerves and blood vessels of the arm were forced to describe a curve backwards, by the pressure of the head of the bone which was in contact with them. The tendons of the supra-spinatus, infra-spinatus, and teres minor were completely torn from the humerus, carrying with them a scale of bone from the tubercle.

To ascertain the obstacles opposed to reduction, the scapula was fixed, the arm raised, and extension applied to the wrist. So long as the hand was held *supine*, the head of the bone remained immoveable, apparently from the closing of the biceps and the triceps behind it. On turning the hand *prone*, rotating the limb inwards, and continuing the extension, reduction was easily effected.

The appearances in this case differed from those observed by Sir Astley Cooper, and agreed with those related by Mr. Thompson. In the case of the latter gentleman, the head of the bone was lodged on the inside of the neck of the scapula, between the subscapularis and teres major—the capsular ligament was completely torn from the whole circumference of the humerus—the attachments of the tendons of the supra-spinatus and infra-spinatus were torn off, with the part of the bone they were inserted into—and some fibres of the subscapularis encircled the neck of the bone. In Sir Astley Cooper's case, on the contrary, the tendon of the subscapularis was torn through, but the supra-spinatus and infra-spinatus remained attached to the tubercle, and reduction could only be effected by relaxing these muscles. Mr. Crampton observes very justly that the comparison of these facts is sufficient to shew, that in apparently similar dislocations of the humerus there may be very different degrees of lesion, and consequently different causes of resistance to reduction.

Case 2. J. W. æt. 30, was precipitated twice consecutively into a burning lime-kiln, from a height of about 15 feet. He was carried to the Meath Hospital. In addition to severe burns and lacerations, there was a dislocation of the humerus under the pectoral muscle, which Mr. M'Namara himself reduced, by merely drawing the arm gently forwards and downwards with one hand, while he pushed the head of the bone towards the glenoid cavity with the other. The man died in the course of the day, and 18 hours after death the joint was dissected.

The dislocation was unattended with the rupture of any muscle, or the separation of any tendon from its insertion into the bone: by a slight effort the dislocation was reproduced, and the pectoral muscles being removed, the polished head of the bone was now seen lodged on the cervix of the scapula, at the root of the coracoid process, but extending nearly as far as the notch in the superior costa; it had passed out through a rent in the capsular ligament, *over* the *upper edge* of the tendon of the subscapularis, detaching this muscle from its connexion (which at this point is but slight) with the inner face of the scapula, and pushing its fibres downwards, so that they formed a curve which partly embraced the neck of the humerus; the supra and infra-spinatus muscles were on the stretch, but had suffered no injury. The cellular substance covering their tendons was deeply ecchymosed, so as to mark their course most distinctly. On replacing the head of the bone, the opening in the capsular ligament, through which it had escaped from its socket, could be distinctly seen. It was formed by a separation of the ligament from the interior side of the brim of the glenoid cavity from top to bottom; it was bounded at the top by the tendon of the supra-spinatus, and at the bottom by the inferior edge of the tendon of

the subscapularis, the rent was continued as far as the root of the lesser tubercle of the os humeri, and was of sufficient extent, but no more, to permit the head of the bone to pass easily through it; the *inferior part of the capsular ligament, however, (the part corresponding with the axilla), was perfect.*

The great blood vessels and nerves lay to the sternal side of the head of the humerus, and were forced a little out of their course. The axis of the head of the bone, in its dislocated position, was scarcely a quarter of an inch higher than the axis of the glenoid cavity.

Mr. Crampton appends to these interesting and valuable facts some practical observations. We will endeavour to give their substance.

I. Resistance to the reduction of a recently dislocated shoulder would seem to be owing to spasmodic contraction of the muscles, and *not* "from the neck of the bone being tightly embraced by the ruptured capsular ligament." Dissection does not prove the latter, and therefore it is mere supposition. Muscular contraction then being the obstacle, we must diminish its power by bleeding, the warm bath, antimony, long-continued extension. Another excellent means of obviating muscular opsition is taking the muscles by *surprise.*

"If before assistants are called in, or any apparatus is applied, the surgeon, while he appears to be occupied merely in ascertaining the nature of the injury, applies a gentle extension at the wrist, and slowly raising the arm to nearly a horizontal position, suddenly pulls it upwards and a little forwards, (that is towards the patient's face,) while at the same time he as suddenly pushes the trunk backwards by pressing, with the left hand, below the axilla, he will in a great number of *recent cases* succeed by this simple process in reducing the dislocation. His success, however, will in a great measure depend on the *unexpectedness* of the attempt; he should, therefore, endeavour to divert the patient's attention from his proceedings, and I know of no means so effectual for this purpose, as inducing him to describe circumstantially every thing connected with the occurrence of the accident; this is a theme on which all patients, who are at all able to express themselves, are sure to expatiate with the greatest satisfaction, and once engaged on so engrossing a topic, it will require but a small degree of tact on the part of the Surgeon to seize the favourable moment when he can apply his force with the greatest advantage."

II. In luxation into the axilla, muscular contraction seems to operate chiefly by pressing the head of the humerus against the inferior part of the brim of the glenoid cavity; in Sir Astley Cooper's case this was mainly effected by the supra-spinatus. The obvious deduction is, to raise the arm to nearly a right angle with the body previous to extension, and not to use any force in pressing the head of the humerus upwards, as that must lock it more firmly.

III. The *direction* of the extension is now generally that of a right angle with the body. In the reduction by the heel in the axilla the direction is nearly parallel with the body, but Mr. C. thinks that more force is necessary with this method. Mr. White, of Manchester, drew the limb directly upwards, but the practice has fallen into disuse—a presumptive proof of its not possessing any superior efficacy. The method has lately been brought forward at the Hôtel Dieu as a novelty. We are not surprised at this. M. Dupuytren has no love for English surgery, and candour forms no part of his merits or acquirements.

IV. Extension is now pretty generally applied to the wrist in preference to the arm. It is less painful, if not more effectual.

"V. Great stress is laid by most surgeons on the advantage of fixing the scapula, as it is called; it may be doubted, however, whether the thing be possible, or if possible, advantageous. It is quite plain that a split cloth, or a napkin with a hole through which the arm is passed, can, when the arm is strongly extended, act only on the inferior costa of the scapula, or rather on the walls of the axilla formed by the edges of the latissimus dorsi, teres major, and pectoralis major muscles; the whole effect of this force can be no

other than to push the inferior angle of the scapula backwards and upwards, consequently to direct its superior angle, and the glenoid cavity downwards, and, by acting on the pectoralis major and latissimus dorsi, to draw the head of the humerus inwards towards the ribs, that is, to remove it *from* the glenoid cavity. To obviate this objection, some surgeons recommend pressure to be made by the hand of an assistant on the acromion of the scapula, so as to push it backwards while the humerus is drawn downwards and outwards; but it is plain that unless the force which the surgeon applies to the head of the scapula to keep it back, be at least equal to the extending force which is applied to the arm, the scapula cannot be *fixed*, it *must* follow the arm; besides when the arm is raised, the deltoid fills up the sub-acromial space and renders it impossible to apply any appreciable force to the acromion. As the neck of the scapula cannot be pushed *upwards*, it it proposed by Bonn, to disengage the bones by pressing the head of the humerus *downwards*, at the moment when the extension is at the utmost; the proposal is a most rational one, and has been adopted for several years past in the County of Dublin Infirmary, as I think, with considerable advantage."*

VI. When a considerable power of extension is required, Mr. Crampton prefers a ladder to the pullies. One end of the ladder is fixed—the patient stands between the bars near this end—the wrist of the affected limb is tied by a jack-towel or handkerchief to the sides of the free end of the ladder at a convenient distance from the body—and thus a powerful lever is obtained, one end of the ladder fixed on the ground being the fulcrum, the other end being free, and its depression, by an assistant producing the extension. Counter-extension is, of course, effected by a towel under or in the axilla.

VII. It has been much mooted whether dislocation forwards is a *primitive* dislocation, and it has been supposed that every luxation is primarily into the axilla. The case related by Mr. Crampton seems to prove that it is, or at least in that instance it was a primitive dislocation, and as the inferior part of the capsule was not ruptured, it would of course have been injurious to have first reduced the head into the axilla. In such a case the clear indication is to force the head of the bone *backwards* towards the glenoid cavity, the axis of which is as nearly as possible in a line with that of the head of the humerus; this can be effectually done by applying a fulcrum immediately below the axilla, and using the dislocated arm as a lever of the first kind; the surgeon should therefore place his left arm extended horizontally, immediately below the walls of the axilla, between the dislocated arm and the chest, and then grasping the wrist in his right hand, he should draw the arm forcibly across the patient's body.

Case. The Hon. Colonel Gore was overturned in his carriage, and suffered a dislocation of the left humerus forwards. Mr. Crampton saw him in less than an hour after the accident. Standing before him, he placed his left arm extended horizontally under his axilla, and grasping the wrist in his right hand, he drew his arm rapidly across his body, so as to bring the hand in contact with the right hip; the bone snapped into the socket at the first effort.

Several lithographic drawings illustrative of the descriptions are appended to the memoir. It is altogether one of a very interesting character, and well worthy the attention of practical surgeons.

* Contrast this with Mr. Toogood's brief remarks on fixing the scapula.

IX. ST. GEORGE'S HOSPITAL.

I. TWO CASES OF MORBID GROWTH FROM THE LOWER JAW, FOR WHICH AN OPERATION WAS PERFORMED.

Case 1. Edward Roberts, æt. 57, admitted December 21st, 1831, under the care of Mr. Brodie.

March 1. The condition of this patient at present is as follows.

On the right side of the lower jaw, on its upper edge and inner surface, and on the contiguous portion of the inside of the cheek, is an ulcerated fungus, about the size of a crown-piece, or not quite so large. The edges are prominent, rather everted, a line or a line and a half above the surrounding surface; the ulceration cup-like, deepest in the centre, its surface pretty smooth, with rather large and florid granulations. The diseased part feels hard and callous, and extends from about the situation of the canine tooth to the ascending ramus of the jaw. Some thickening of the cheek immediately around the disease, and the jaw seems somewhat increased in thickness; bone not exposed. Externally, when the mouth is closed a prominence is observed on the cheek immediately below the malar bone, and corresponding in situation with the morbid growth within. Ulcerated part little tender on pressure. Complains of slight pain occasionally shooting to the ear and lower margin of the orbit. A slightly enlarged lymphatic gland felt immediately beneath the angle of the jaw.

Aspect pallid and unhealthy—some emaciation. Complains of cough, to which he is subject every Winter—expansion of chest imperfect—too great resonance of voice under clavicles, but not actual pectoriloquism. Action of heart rather strong—pulse full. Tongue moist—bowels irregular.

Says that he first discovered a lump in the site of the present disease in May or June last; he thought it was a gumboil. The disease increased gradually, unattended with pain, and he is not aware when ulceration took place. Several teeth have been extracted at various times, so that at present none exist on the affected side posterior to the outer incisor. The disease has made progress since his admission.

On his entrance into the hospital he was ordered a dose or two of blue-pill and black-draught, which deranged his health a good deal. He afterwards suffered much from the cough, was considered to have phthisis, was turned over to Dr. Hewett, and after a certain length of time returned to Mr. Brodie. Dr. Hewett, we believe, had employed iodine in some form. The operation, which had long been postponed in consequence of the thoracic complaint, was performed on the 5th March, by Mr. Brodie.

An incision begun at the angle of the mouth and carried backwards through the whole substance of the cheek to opposite the angle of the jaw; another incision begun and ended at the same points, but inclosing with the last an elliptical portion of integuments, &c. Lower flap dissected downwards from the anterior edge of ramus of jaw to symphysis, exposing the external surface of the bone. Saw then carried through the mental portion, between the two left incisors. Right portion of jaw raised and directed outwards, and knife carried close behind it, so as to dissect it from its connexions within the mouth and towards the neck. Upper flap dissected from ascending ramus of jaw above the diseased part. Ascending ramus sawed obliquely from before backwards and downwards, and loose portions of jaw, &c. removed by a little dissection. Mucous membrane at commissure of upper and lower jaws being involved in the disease inferiorly, was dissected out. During the operation not many vessels of size required ligature, and no great quantity of blood was lost. One or two arteries bled smartly on the inner side of the sawed end of the bone at the ramus. The flaps of integument were brought together by several sutures, sticking-plaster, compress, and half-handkerchief.

The patient was now removed to bed, and soon afterwards bleeding occurred, and about an ounce of blood was lost when a double-headed roller and ice were applied, which checked the hæmorrhage.

At 6, p. m., he had an opiate injection, and at 10, p. m., an injection of beef-tea with laudanum. The opium produced a good deal of drowsiness and some stertor. In the course of the next day he had two beef and one thick gruel injection. A draught of citrate of potass was given to allay thirst, and a little chicken-broth was swallowed occasionally. On the 10th, a calomel

purge was given. The majority of the sutures were removed on the fourth day. The greater part of the wound united by the first intention, though posteriorly a small aperture remained for some time and gave issue to the saliva. This was finally closed, and he left the hospital apparently well, with the exception of cough, which still continued troublesome. There was remarkably little deformity.

The disease returned in this patient, but we do not at present know the particulars.

Case 2. Anne Taylor, æt. 45, admitted March 8th, 1830, under the care of Mr. Brodie.

Great enlargement of the right side of the lower jaw-bone, extending from the second incisor tooth to the condyle, and forming a large globular tumour, occupying nearly the whole of the right side of the face. Tumour extending downwards over upper part of neck—inwards displacing the tongue, and interfering materially with speech and mastication—but chiefly upwards and outwards towards the malar bone. In some parts it is of bony hardness—in others it communicates the sensation of the finger pressing on an elastic gum bottle, and appears to contain fluid. Integuments not at all discoloured—no enlargement of the neighbouring glands—little pain—great numbness about the chin and angle of the mouth. General health good.

First noticed the disease 18 years ago, when it was a small, hard, incompressible lump, immediately over the angle of the jaw. It gave no pain, and its increase was for a long time extremely slow. Six months since, it was not larger than a hen's egg. About that time it began to enlarge very rapidly, and has continued to do so ever since.

March 25th. Operation commenced by an incision, dividing the lip opposite the symphysis, and extending to the upper part of the thyroid cartilage—a second, made from the back of the zygoma to a short distance below the corner of the os hyoides—centres of the two incisions connected by one running transversely across the most prominent part of the tumour. Parts covering the tumour dissected upwards and downwards, so as to form two flaps. In doing this, an opening was made into the tumour, and about two ounces of transparent gelatinous fluid escaped. Several arteries of size requiring ligature—parotid gland pushed upwards, without being much injured. Bone divided at the symphysis with a metacarpal saw. It was now found that the ramus, as high as the condyle, as well as the coronoid process, participated in the disease, the latter projecting considerably beneath the zygoma. The ligaments were divided, and the bone dislocated. On passing the scalpel behind the bone, so as to separate the parts attached to its internal surface, a large artery, supposed to be the internal maxillary, increased in size, was divided; several other vessels were also cut in this situation. The bleeding was suspended by pressure, while the removal of the diseased part was completed. Towards the latter end of the operation the patient became much exhausted; she was allowed to remain in the horizontal position for some time, but, the circulation not being restored, a ligature was placed on the external carotid, about half an inch from its origin, as a security against the recurrence of hæmorrhage. The ligature of the vessel required but little dissection, as it lay pulsating on the surface of the wound. The integuments were brought together by sutures, and some light dressing applied.

Vespere. On her removal to bed, she had 20 minims of the liq. op. sed. She vomited in about an hour afterwards. In about three hours, she had in a great measure recovered from the collapse produced by the operation, and there was a slight oozing of blood from the mouth. She had a good night, and next day she was allowed beef tea and arrow-root. On that evening the pulse was 120, with some jerk—skin rather dry—bowels not open since the operation. *V.S. ad* ʒviij. *Injectio* c̄ *Ol. ricini,* ʒj. *cràs mane.*

In the evening of the 28th she felt chilly, and, on the 29th, she seemed rather depressed. Nearly the whole of

the wound appeared to have adhered; the integuments had sloughed in two or three spots. The bowels were disposed to be confined. *Vin. rubri, ad* ℥iv. *Ext. col. c.* gr. v. *Hyd. sub.* gr. iij. *stat.*

On the 30th, a blush of redness, with defined edge, had appeared upon the temple. Pulse 100—skin cool. The erysipelas spread slowly. On April 1st, a slough separated in the site of the angle of the jaw, and left an opening communicating with the mouth. On the 2d, the erysipelas was spreading down the neck—pulse 108 and weak—bowels disposed to be relaxed. Opiates, with aromatics, checked the diarrhœa, but the erysipelas continued to spread; she grew weaker, and had nocturnal delirium. She voided several lumbrici, from the bowels. On the 5th, she was ordered quina, with opium. In consequence of the external opening communicating with the mouth, it became necessary to administer nourishment through the stomach pump. She sank progressively, and at 2, a.m. of the 9th, she died.

Sectio Cadaveris. About three ozs. of turbid serum in the cavity of each pleura. At the posterior part of the middle lobe of the right, and inferior lobe of the left lung, several detached, whitish-looking spots, a good deal resembling purulent deposites in their commencement. The substance of the lung surrounding these slightly inflamed.

No other visceral affection.

II. The next case is one of morbid growth, apparently fungoid, of the antrum. No operation was performed, and the case will shew how slowly some of these malignant tumours proceed.

Case. Jemima Young, laundress, æt. 21, admitted Sept. 29th, 1830, under the care of Mr. Brodie.

Prominent enlargement of left cheek, about the size of a small apple, and somewhat pointed—tumour reaching from just below the infra-orbital ridge to the gum. In the situation of the infra-orbital fossa, the tumour feels elastic externally, as if the bony wall of the antrum were absorbed. Gum, from left canine tooth to dens sapientiæ, deprived of teeth, rounded, prominent, and elastic—palate on that side somewhat prominent and elastic. By alternate pressure of one finger on the outside of the gum, and another on the palate—indistinct fluctuation, or rather elasticity, perceived; the same on similar pressure of the prominent part of the cheek and gum. No encroachment on the orbit. Prominent part of the cheek painful on pressure—occasionally a little darting pain in the tumour and side of the head. Pulse rather frequent—complexion rather sallow—says her health is good—catamenia regular.

Four years ago, had pains in the teeth of the left side. Extraction was attempted, but the teeth were broken, and parts of them left behind. Sixteen months ago the stumps were taken out, and, about that time, she first noticed enlargement of the gum. Matter followed the removal of the stumps, and she describes a probe as having been passed up to the eye, evidently in the antrum. The matter was discharged for a fortnight, and then the opening closed. It has since been re-established several times by operation, but has always closed spontaneously afterwards. The gum was punctured lately in Guy's Hospital—blood only issued. She was there recommended by Sir Astley Cooper to submit to an operation, but refused, and left the hospital. Six weeks ago, Mr. Brodie again punctured the gum—again blood issued. The tumour has been increasing much lately.

On the 6th October the gum gave way, and according to her account, some matter was discharged. On the 8th Mr. Brodie once more punctured the gum with a lancet, but procured an evacuation of blood only. The divided structure appeared of a gelatinous consistence. The patient was now put on iodine, ten minims of the tincture of which she was ordered thrice daily.

The gum, where it was cut, evinced some disposition to produce a fungus, but this subsided. On Nov. 5th, the dose of the tincture of iodine was increased to 15 minims thrice daily. On the 29th the iodine was discontinued in consequence of its disagreeing with

the health. On December 7th, it was resumed in doses of eight minims thrice daily. On the 31st it was again necessary to discontinue it, and to substitute purgatives and leeches to the temples. On the 12th January the iodine was repeated; on Feb. 3d, the dose augmented to 15 minims; on the 6th to 20 minims; and on the 9th one drachm of the ointment of the hydriodate of potass rubbed twice daily upon the tumor. On the 12th, the iodine having again disagreed, was omitted, and not afterwards tried. The further treatment was unimportant.

March 5th. Within the last fortnight the tumor has made more progress than it had done for some time previously. Its extension has been chiefly outwards on the cheek. During the last month it has increased so as to reach from the dens sapientiæ to the left lateral incisor, being bisected in the line of the gum by a deepish ulcerated furrow. More of the left side of the bony palate is absorbed, and the tumor displays in the mouth, a shining and smooth appearance.

May 1st. A few days ago the poor girl left the hospital. The tumor has been making rapid progress latterly, projecting more on the cheek, and even protruding between the lips. She has suffered from pains in the head, but otherwise the health has been little deteriorated, and she has scarcely lost flesh.

We saw the patient accidentally some months after this. The tumor had increased very little in size since the period of her quitting the hospital. The termination of the case is unknown to us.

III. POLYPOID GROWTH FROM THE ÆTHMOIDAL CELLS.

Case. Caroline Harris, aged between 50 and 60, was admitted July 28, 1830, under the care of Dr. Hewett.

The left side of the face, from the angle of the mouth to the orbit, was tumefied, the soft parts a little thickened, the integument tinged with a slight flush. She complained of pain in the cheek extending to the side of the nose, inner angle of the orbit, and brow. The Schneiderian membrane of both nostrils presented some superficial ulceration. There was considerable purulent discharge from the nose, falling down the posterior nares into her throat, when she lay upon her back. Health tolerably good.

The complaint had begun in the preceding January, when convalescent from a severe attack of erysipelas of the face.

In August she was placed under the care of Mr. Brodie, who immediately punctured the antrum with one end of a pair of scissors, immediately above the first molar tooth. Only fluid issued. Much tumefaction ensued, and for a few days the pain and discharge seemed both relieved. The improvement, however, was temporary, for on Oct. 3, there was more discharge than ever. The gum above the teeth seemed thickened.

Sept. 29th. Hyd. Sub., gr. ij. *Opii*, gr. ½, *bis die.*

Oct. 4th. Sumat pil. semel die.

6th. Sumat pil. alternis diebus.

7th. Mouth very sore indeed. *Garg. alum. Omr. pil.*

11th. Inf. casarill. ℥xij. *T. card. c.* ℥j. *M. t. d. s.*

19th. During the salivation the pain and discharge diminished in some degree, but both have nearly regained their former state.

25th. Pil. hyd. sub. c. gr. v. *o. n.*

Dec. 9th. Quin. sul. gr. ij. *Acid. sul. dil.* ♏. iv. *Ex. aq. t.* v.

Omr. alia.

17th. Omr. haust. quinæ.

Soon after this she was attacked with inflammation and suppuration in and about a bunyon on the great toe. When this was passing away, she was seized with fever of a low type and symptoms resembling those of latent pleuro-pneumonia. After three or four days she died.

On dissection no trace of inflammation was found in the lungs, nor any recent organic change of consequence elsewhere.* Attached to the parietes

* We do not believe that the veins of the limb were examined.

of the æthmoidal cells on the left side was a polypoid growth, organized, not quite so translucent as the gelatinous polypus, not of much magnitude, nor of any regular form.

IV. Scrofulous Disease of Lower Jaw.

Case. Joseph Spilman, æt. 11, admitted May 5th, 1830, under the care of Mr. Brodie.

Lower jaw on right side presenting an equable enlargement, extending from near the angle to near the symphysis—generally hard, smooth, not tender to the touch — in diameter from above downwards about an inch and a half, from before backwards two inches and a half. Within the mouth at the root of the first molar tooth, and at the point of junction between the cheek and gum, an ulcerated opening with rather raised borders, from which pus wells upon pressing the external tumor, and through which a probe passes down to exposed bone. Skin covering the tumor quite healthy. On left fore-arm, over about the middle third of the ulna, hardness and tumefaction, with several ulcerated openings; no exposed bone felt here. A great number of warts upon the hands. Appearance delicate and scrofulous, with a languid circulation.

The tumor on the jaw was of two years' duration. He had observed that pus appeared in his mouth since the last Summer. The affection of the arm commenced nearly at the same time as that of the jaw.

Tinct. ferri muriatis, ℥xv. *t. d. Cat. lini. cubito.*

July 3d. To-day Mr. Brodie enlarged the opening in the mucous membrane, and extracted three pieces of dead bone. On the 23d several other pieces of bone were extracted. The ulcerated opening diminished in size, no more carious bone could be felt, and in September the boy was dismissed the hospital very much improved both locally and generally, but not cured. There was still a considerable degree of thickening about the angle of the jaw, and probably some bone yet to be separated.

We have since heard, but we cannot vouch for the truth of the report, that the boy is dead. We have not been able to learn any particulars.

X. Guy's Hospital.

Ulcerations of the Face treated by Acids.*

We notice these cases, not because they are possessed of much intrinsic interest, but because one or two remarks are made which ought not to pass unnoticed. The cases are too short to admit of further abbreviation.

Case. "Sarah Cobbins, æt. 36, of a sallow, unhealthy complexion, was admitted into Guy's Hospital, under Mr. Key, on the 12th of September, with a deep strumous excavated ulcer of the upper lip, of two years' standing, which had extended to and nearly destroyed the septum nasi: had been under the care of a surgeon in the country during that time, but derived no benefit from the remedies which were employed. She was ordered on her admission Acid. Nitric. Dil. gtt. xl. ex Decoct. Sarsa. ter die sumend.; and the following lotion to be applied to the sore:— ℞. Ext. Opii, gr. v. Argent. Nitrat. gr. iij. Aquæ ℥j. M.—which treatment she continued to the 13th of October without any beneficial result. Subsequent to her admission, a small abscess formed on the anterior surface of the cartilage of the nose, which, on being opened, ulcerated, and destroyed a considerable portion of its substance.

Oct. 14th.—Ordered to continue the mixture, with the addition of 10 drops of the Acid. Nitric. Dil. to each dose; and to apply the following lotion to the sores:—

℞. Acid. Nitric.
Acid. Muriat. ää. gtt. xij.
Ext. Opii, ℈j.
Aquæ, ℥vj.

Under the latter treatment, the ulcer has rapidly improved up to the present

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* Medical Gazette, Dec. 15th, 1832.

time, and she is now (Nov. 30th) sufficiently recovered to be enabled to leave the hospital.

This woman had evidently suffered severely from syphilis; the throat had been formerly ulcerated and the velum injured. Her constitution was now in so impaired a condition, that mercury could not be exhibited, even supposing that the disease in the nose had a venereal disposition. Mr. Key, therefore, put her under a course of dilute nitric acid, which he commonly prescribes when mercury is indicated, but cannot be exhibited, on account of the patient's general ill health. The effect of this remedy, together with the local application of the nitro-muriatic acid lotion has been most satisfactorily shewn in the progressive improvement of health, and the uninterrupted healing action of the ulcer."

We have no means of knowing whether the reporter is correct in attributing the preceding sentiments to Mr. Key. We hope he is not. The gentleman who signs himself W. J. E. observes that the woman had *evidently* suffered severely from syphilis, apparently, because the throat had formerly been ulcerated. We can tell this gentleman, that if there was no other evidence than what he has brought forward, he has very much to learn, and the less he displays what he has learnt, the better. We need scarcely observe that ulceration of the throat is constantly occurring from the administration of mercury, and is cured by withdrawing that medicine. The reporter also observes that, Mr. Key commonly prescribes dilute nitric acid when mercury is indicated, but cannot be exhibited on account of the state of the patient's health. If this be the case we are rather surprised at Mr. Key. From what we have seen of the venereal disease, we must say, that nitric acid has always agreed best when mercury has *not* been indicated. There is no charm about nitric acid, it acts in these, as in other cases, like a tonic, and tonics, as a general rule, are required where mercury is not. If mercury is indicated, and the state of the general health forbids its use, still the plan of treatment, attributed by the reporter to Mr. Key, is a bad one; for the improvement of the health will not remove the indication for mercury, but confirm it. The truth is, that if mercury be *indicated*, nothing else will do; if the general health is bad, it must be improved, but as soon as that improvement has been effected, the indication for mercury will only become more apparent. The whole tenor of the reporter's remarks is based on a false notion of the venereal disease.

CASE 2. "*Strumous Ulcers commencing in Ecthyma.*"

"Susan Burford, æt. 18, admitted under Mr. Key, October 25th, affected with strumous cachectic ulcers on both of the thighs and legs, of three months' standing. The patient is of an unhealthy exsanguineous appearance, subject to hysteria, and has had her catamenia absent four months. On her admission, the surfaces of the sores were covered by a thick brown incrustation, which being removed, exposed unhealthy indolent ulcers. The first remedies employed were a poultice, to remove the incrustations, and, internally, infus. cascarillæ, with carbonate of soda, bis die, and hydr. c̄ cretâ, gr. ij. omni nocte, in starch. These remedies were continued till the 29th, when the sores became uncovered, and the following lotions prescribed.

Acid. Mur. gtt. xij.; Acid. Nitric. gtt. xij.; Ext. Opii, ℈j.; Aq. Puræ, ℥vj. ft. lotio.

This was applied to the right leg, on which were seated the deepest ulcers.

To the other leg the iodine lotion, consisting of—

Iod. gr. ij.; Potass. Hydriod. ℈j.; Aq. Puræ, ℥vj. ft. lotio.

At the end of a week the gums became affected by the hyd. c̄ cretâ, which gradually increased till November 12th, when it was thought expedient to administer the mercurial every other night only, being sufficient to keep the constitution under its influence. The lotions have been persisted in up to the present period, with the greatest benefit, all the ulcers having nearly healed."

This case is headed, and we suppose was considered "strumous ulcers commencing in ecthyma." Yet the patient was salivated and maintained so. We would ask, for which affection of this bi-corned malady, salivation was deemed expedient—for the struma or the cachexia? We had deemed that salivation was not adapted to, nor by good surgeons adopted in, either. Let the reporter answer.

"These ulcers, at her admission into the hospital, bore the character of rupia, and the scabs had both the form and the dirty brown tint characteristic of syphilitic action; but on closely questioning her, there was no reason for believing that she had had any symptoms to warrant this suspicion. They were, therefore, considered and treated as strumous ulcers, and the mildest form of mercurial alterative, with alkali, and the cascarilla, were administered, according to the plan which Mr. Key usually finds most successful in treating this kind of sore."

So the salivation, by the "mildest form of mercurial alterative," was employed for the strumous taint, and, what is more, Mr. Key finds this the most successful plan of treating this kind of sore. The reporter has contrived to convey a great deal of information in a very words:—first, that there is "a form and a dirty-brown tint in a rupia scab, characteristic of syphilitic action—and secondly, that the hydrarg. c̄ cretâ is the mildest form of mercurial alterative. The first piece of information is quite new to us; who had thought that rupia was a cachectic disease, and not essentially syphilitic. The second is also new, for we had imagined that the Plummer's pill was a milder alterative than the hydrargyrus c̄ cretâ. We live and learn.

XI. London Hospital.

Osteo-Sarcoma—Removal of the Superior Maxillary and Malar Bones.*

In the present number of this Journal will be found the details of three cases of "osteo-sarcoma," for which operations were performed without success. The present will unfortunately swell the list.

Eliz. B. æt. 48, admitted Sept. 8th, under Mr. Scott. There was a large "osteo-sarcomatous tumour," principally in the situation of the left malar bone, and on removing the last molar tooth from its socket, the probe was readily passed into the antrum. The palatine process of the superior maxillary bone seemed sound, and resisted the passage of a sharp-pointed probe. A grooved needle was introduced beneath the upper lip into the swelling, and on withdrawing it the groove was found filled with a thick medullary substance. The health was indifferent. The disease had commenced with pain six months previously.

On Sept. 12th, the operation was performed by Mr. Scott. It was begun by tying the external carotid. An incision was now made, extending from the angle of the mouth obliquely upwards, and backwards towards the zygoma, and the integuments were dissected upwards from the surface of the tumor. The eye was then separated from its loose cellular connexion with the floor of the orbit, and the left ala of the nose detached. With the strong cutting plyers, the malar and temporal bones were disunited at the zygoma. The malar was next detached from the frontal bone with the same instrument, the nasal process of the superior maxillary bone cut through, and lastly, the two maxillary bones separated at the longitudinal palate suture. The tumor was then readily dissected away—the chasm filled with lint—and the edges brought together by sutures. The wound united, with the exception of the upper part, the ligature came away on the 12th day, and the health seemed at first improved. Subsequently, cough and hectic came on, and the patient died on the 20th October.

On examination there was necrosis of a portion of the zygoma, but no return of the disease in the face. The lungs were studded with "tubercles." The disease was medullary; it had des-

* Med. Gazette, Jan. 12th, 1833.

troyed the whole of the malar bone, and seemed to have grown from the outer wall of the antrum.

XII. MIDDLESEX HOSPITAL.

I. SIR CHARLES BELL ON CONTRACTION OF THE PREPUCE.*

This excellent physiologist and able surgeon was called to Seven Oaks to see a young boy, who had extreme difficulty of making water. This was found to be owing to contraction of the orifice of the prepuce, and on slitting this up the relief was complete, and the boy exclaimed, "I shall now be able to piss against the wall like papa."

A boy, æt. 5, was admitted into the Middlesex Hospital, with the scrotum enormously distended and sloughing at its posterior and inferior part—the integuments of the penis distended—and phymosis. The mother declared that the parts had only begun to swell two days previously, and this was all the history that could be procured. Scarifications were made in the scrotum and urinous fluid evacuated. On the evening of the second day after his admission he died.

On examination the urethra was found quite free from contraction. The orifice of the prepuce was closed, and ulceration was found extending back into the cellular substance of the integuments of the penis;—ulceration existed at the angle made by the prepuce and frænum. There was no other disease.

Sir C. Bell observes that the second case displays an ulterior degree of the same affection that existed in the first. The prepuce, distended in the act of micturition, becomes successively irritated inflamed, ulcerated; the urine escapes into the cellular membrane; and the consequence is sloughing of the latter. Sir C. Bell divides natural phymosis into four varieties, or degrees.

"You have before you, then, gentlemen, the effects of the first or greatest degree of stricture in the prepuce, or natural phymosis. You perceive that the natural phymosis is followed by inflammation and thickening, that the orifice becomes smaller through the thickening of the margins of the hole, and you see the unhappy consequences. Marking this as the first or the greatest degree of stricture of the prepuce, we come, in the *second* place, to common phymosis, where the prepuce permits the urine to flow freely, and consequently without distending it. Now the prepuce not being washed by the urine, a foul secretion from the glands about the corona-glandis collects within it, and so inflammation and thickening, with the discharge of purulent matter, and sometimes ulceration, follow. The third instance to be noticed is where there is only that degree of narrowing of the prepuce that it prevents the foreskin from being drawn freely over the glans; and when by accident the prepuce is so drawn, it is in danger of producing paraphymosis. There is a *fourth* kind, and it is to it that I will particularly draw your attention, because the effects of it are not noticed, and yet they are very terrible, so that patients are almost inclined to part with life from the distress that it produces. This distress does not arise from the urinary organs: the difficulty is not in discharging the urine; there is just that degree of tension at the margin of the prepuce that it can be drawn over the glans, and then it produces a a stricture; but it is only during priapism, and emission is obstructed, not urine; and the consequences are excessive irritation and great distress of body and mind. Thus you are acquainted with the first degree of stricture; you see that the second is where there is an accumulation of the secretion and consequent inflammation caused by the stricture; the third degree is where there is danger of paraphymosis; and a fourth degree is where the skin can be drawn backwards and forwards, but is too narrow for the distension of the penis in a state of priapism, and then it produces stricture, not upon the urethra as the canal for the urine, but as it belongs to the organs of generation."

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* Med. Gazette, Jan. 12th, 1833.

Sir Charles Bell says nothing about the treatment of these cases. We will supply the deficiency. Slit up the prepuce at the distance of about a quarter of an inch from the frænum, and all inconvenience vanishes. We have done this in several instances of the last affection at which Sir C. glances, and the relief was complete and permanent. The lecturer goes on to notice another case.

Case. A man, æt. 42, was admitted with the prepuce and integuments of the penis enormously enlarged, and firmly so—a small abscess, opening externally, anterior to the scrotum—issue of the urine through the inner membrane of the prepuce, having arrived there by travelling between the skin and body of the penis—and, finally, a narrow stricture. The patient had had acute gonorrhœa one year previously; the difficulty of making water for six months.

Sir C. Bell remarks that, during the gonorrhœa, one of the lacunæ had become inflamed, formed an abscess, urine got into it, ulceration occurred, and the urine passed between the skin and body of the penis to the inner prepuce, at the angle, through which it escaped by another process of ulceration. The stricture was occasioned by the thickenings, &c. round the lacunar abscess.

"This inflammation of the lacunæ is a very troublesome complaint, and will sometimes continue long after the gonorrhœa has entirely subsided, being attended with tumor and thickening of the integuments opposite to the part. It is to be treated, first, by all the possible means of subduing inflammation; then by an injection; I have touched the point with caustic from the inside, and have sometimes been forced to make an incision on the outside. We shall be satisfied in the present case with the use of the bougie and the gradual dilatation of the thickened membrane of the urethra. Respecting the use of injections, let me remind you, that an injection for gonorrhœa, comparatively mild and innocent, will be made most effectual, if you take care that the patient compress the urethra just anterior to the scrotum, and also that he prevent the injection from coming back on the syringe. This method of injecting the canal will produce fulness and tension in the part which is the seat of the original specific inflammation of gonorrhœa. You may thus manage a gonorrhœa by an injection which is comparatively mild, and without the necessity of increasing its strength so as to endanger the bringing on of inflammation from that new cause: and this manner of distending the urethra is particularly necessary when the inflammation fixes upon the lacunæ, for without it the astringent does not reach the diseased surface."

We may mention, by the way, that if the lacunar abscess is opened from without, it is apt to occasion a very troublesome urinary fistula.

II. Femoral Hernia, with Double Hernial Sac.*

Case. M. M. æt. 37, admitted April 18th, vesp., with femoral hernia on the right side. Great pain and tension of the abdomen—stercoraceous vomiting—pulse small, quick, sharp—countenance pallid, anxious. She had been ruptured for 17 years, and the tumour had never entirely disappeared—the hernia had been down for five days—the bowels not relieved for six. She had been treated for peritonitis with leeches and a blister.

The tumour being irreducible by the taxis and warm bath, Mr. Tuson, after consultation with Mr. Arnott, determined to operate, which he did at 1, a.m. of the 19th. The sac being opened, half an ounce of serum escaped, and a curious tumour was observed. Appearing to be thick and vascular, it was thought to be part of the large intestine. The stricture was divided, by cutting the ligament of Gimbernat, and the tumour was compressed, but a considerable portion remained irreducible. An incision was made into it, when it was found to be the true sac, with the intestine within it, but not the slightest

* Lancet, May 25th, 1833.

appearance of fluid. The intestine was highly vascular—it was returned. *Castor oil immediately—injection in three hours.*

10, a.m. Bowels not opened—much swelling over abdomen—pulse 100. *Enema. H. sal. c May. sul.* ʒj. *4tis horis.* At noon, great pain and tension of abdomen—anxious countenance—pulse 120. *Hirud.* xvj. *Cal.* gr. ij. *8vis hor.* The bowels had been moved twice, and were opened again. At 10, p.m. she was relieved, but complained of sinking and want of sleep. *Haust. morph. acet.* At 1, p.m. of the 20th, more tenderness of abdomen and anxiety—pulse 100, full. *Hirud.* xij. 8, p.m. *Castor oil.* From this time, the symptoms continued unmitigated. The treatment consisted in calomel and Dover's powder—saline purgatives—bleeding to 12 ozs. on the 21st—bleeding to 4 ozs. on the 22d, with 12 leeches. At 11, a.m. of this day she died.

Inspection. Stomach and intestines much distended with fluid and flatus, and generally inflamed. The intestine which had been in the sac had never recovered itself; at one part it had sloughed, and a portion of its contents were in the abdomen; the part opposed to the stricture had given way.

Perhaps the treatment might have been more depletory in the first instance, with advantage.

IV.

Miscellanies.

I. PERIODICAL PRESS.

The desire of R. B. S. to give our readers "an accurate review, or short description of the Medical Periodical Press, as it at present exists, or has existed, since the year 1800,"—is a task which could not be reasonably or fairly undertaken by us. We do not see the lives of men published till after their death—and therefore we could not possibly offer any critical notices of contemporary periodicals. Our correspondent complains that, in remote parts of the country, medical readers are often puzzled by references to periodical journals, of which they are ignorant, and wishes to know what are the actual existing medical journals of the present day. This list we can have no objection to furnish, according to seniority.

1. The LONDON MEDICAL and PHYSICAL JOURNAL, which commenced in March, 1799, and still continues in its monthly form. This is, of course, the father of existing periodical journals of medicine in this country. It has attained its 68th volume.

2. The EDINBURGH MEDICAL and SURGICAL JOURNAL, *quarterly*, commenced in January, 1805, and still continues, having attained its 28th year.

3. The "NEW MEDICAL and PHYSICAL JOURNAL," which commenced in a *monthly* form, in 1811, and continued till January, 1816, when it changed its title to "The MEDICO-CHIRURGICAL JOURNAL and REVIEW," conducted by Drs. Shearman, Johnson, and Palmer. The work continued in its *monthly* form till July, 1818, when it became the property of Dr. Johnson, who changed it into a *quarterly* periodical, under the title of the "MEDICO-CHIRURGICAL REVIEW, &c." which it still retains.

4. The LONDON MEDICAL REPOSITORY, which commenced in 1814, as a monthly journal, and still continues, but now in a *weekly* form, under the title of the "LONDON MEDICAL and SURGICAL JOURNAL."

5. The LANCET, a weekly Journal, which commenced in the Autumn of 1823, and still continues.

6. The LONDON MEDICAL GAZETTE, which commenced in December, 1827, as a weekly publication, still continues.

7. The GLASGOW JOURNAL of MEDICINE and SURGERY, is the oldest of the English provincial periodicals, and, indeed, we may say, the only one now in existence.

8. The DUBLIN JOURNAL of MEDICAL and CHEMICAL SCIENCE, has lately started, and is well known to our readers, by the extracts which we give from this our respected contemporary.

Thus then, we see that, at the beginning of the present century there was but *one* periodical journal in our pro-

fession; and now there are EIGHT! If this be not a proof of the "*march of intellect*," we know not what is! We have not touched on the many journals which have started during the last 33 years, and which are now no more. "De mortuis nil." As to our living contemporaries, there is not one which we wish to see extinct—not one against which we harbour the slightest feeling of envy, hatred, or malice. Content with our own success, we wish a greater degree of it to every one of them. We hope yet to see the day, when that courtesy and decorum which ought to exist among members of a liberal and enlightened profession, will also exist among periodical journalists. We do not attempt to absolve ourselves from the sin and shame of having entered into contentions and collisions; but we trust that, in accordance with the spirit of the times, we have REFORMED. Sincerely do we hope that our contemporaries will pursue the same course.

II. REMARKABLE CESSATION OF THE PULSE IN BOTH ARMS. By Dr. FERGUSSON, Assist.-Surgeon 5th Regt.

Private John Mathews, 6th Regt. of Foot, aged 24, a delicate young man of leuco-phlegmatic temperament, by trade a tailor, has been several times in hospital, with inflammation of both testicles and tonsils, brought on simultaneously by exposure to wet or cold.

Was sent on escort duty from Abington to Trinicrig, on the 3d of August, 1832, got thoroughly drenched with rain, and on his return was seized with violent pneumonia, which was characterized by distressing palpitation of the heart and a *total absence of pulse in either of his arms or wrists*, though the pulsation of the carotids appeared stronger than usual. The inflammatory symptoms were removed by the usual means, but *this anomalous symptom still continues.*

The chest sounds well on percussion and, on applying the stethoscope, the respiratory murmur is distinctly audible in all parts, but is accompanied by a subcrepitating râle in the left side of chest; the heart's pulsation is quick and regular, but weak, and can be felt under the margin of the 7th rib. Some months since there was a pulsation under the upper third of the sternum, which is not now audible. The palpitation is always worse at night, and is accompanied by a peculiar *noise*, which deprives him of all rest; he is also frequently seized with a shooting pain under the sternum and in the region of the heart, which is quite intolerable: this always attacks him at night, and is attended with a feeling of suffocation and obstructed circulation to the head; the face becomes rather livid, and the eyes tinged; he can only partake of spoon or milk diet, but he does not reduce in flesh, yet he is incapable of the slightest exertion.

☞ Dr. F. requests our opinion on the above case; but we prefer waiting till next quarter, when the issue will probably be known.

III. CHOLERA.

WE are induced once more to suspend the publication of our EXCERPTA CHOLERALOGICA, since the subject seems to have dropped entirely from men's minds for some months past. If it be the specific contagious disease which some of our contemporaries have designated it, we will surely have the disease again in the course of the Summer or Autumn, and then we shall resume our Excerpta. By the way, we have lately seen three or four cases of cholera precisely similar to even the bad cases of last year. None of them, however, proved fatal.

WE have received the letter of an "Apothecary," reflecting on a gentleman who has lately written on medical politics in the Sister Isle. We can have nothing to do with men's private affairs, but only with the books which they may usher before the public.

WE have been favoured with a view of a Lithographic Plate of Inguinal Hernia, about to be published, with one of Femoral Hernia, by Mr. BLOXAM, of Hanover-Street. It is on the plan of Layers, and depicts the Fasciæ, apertures, &c. with equal accuracy and clearness. It would be very useful to the student.

IV. Medical Politics.

Apothecaries.

A considerable excitement has been raised in more than one branch of the profession by the recent proceedings in Parliament. Before this Journal sees the light, the question will probably be decided, not quite to the satisfaction of any party. It is almost needless for us to make any remarks under such circumstances, and therefore we shall be very brief. And first, in respect to the graduates of Edinburgh. If such graduates choose to practise physic in England, and dispense their own medicines, it is monstrous that they should be obliged to undergo an examination in physic before a tribunal of London Apothecaries! The production of their diploma before the Court of Examiners ought to be a sufficient guarantee of their competency to practise physic in any way they please, and the licence should be immediately granted them, on paying a small sum of money, and undergoing an examination in pharmacy. We think it quite necessary that they should present themselves, with their diplomas, before the Company, in order that they may be enrolled as regular and certified practitioners, otherwise the Company will find it difficult to prosecute unqualified practitioners, not knowing whether or not they may hold a diploma. Nearly the same line of argument ought, we think, to hold good respecting members of the Dublin and Edinburgh Colleges of Surgery. The production of their diplomas ought to entitle them to a recognition, or, at all events, to an examination, not only before the Court of Examiners of the Apothecaries' Company, but of the Royal College of Surgeons. It is nonsense to say that England will be swamped with Scotch practitioners, if such facilities be allowed. Neither will these facilities induce English youths to go to Scotland to acquire their medical education, unless an obstinate adherence to the APPRENTICESHIP-SYSTEM drives a certain number beyond the Tweed, to escape the drudgery and degradation of five years behind the counter, like a cheese-monger's fag! We have reason to believe that some such regulations as the above will be agreed upon by the framers of the Bill and the opposers of it. But we earnestly exhort the medical profession throughout the whole kingdom to petition the legislature, without delay, for a Parliamentary inquiry into the general state of the medical profession in these Isles. Nothing short of such an inquiry will be productive of any lasting benefit, or secure any liberal measure.

BIBLIOGRAPHICAL RECORD;

OR,

Works received for Review since the last Quarter.

1. A Treatise on the Physiology and Diseases of the Eye; containing a new Mode of curing Cataract without Operation—Experiments and Observations on Vision, &c. together with Remarks on the Preservation of Sight, and on Spectacles, Reading-Glasses, &c. By JOHN HARRISON CURTIS, Esq. Oculist, &c. Octavo, pp. 222, with a coloured Plate, price 7*s.* 6*d.* bds. Longman and Co. March, 1833.

☞ *There is more originality, as well as research, in this volume on the eye than in Mr. Curtis's work on the Ear although the latter has gone through five editions.*

2. Observations on Impediments of Speech; with some Remarks on their successful Treatment. In a Letter to T. J. Pettigrew, Esq. By RICHD. CULL. 8vo pp. 31. Renshaw and Rush, March, 1833

☞ *There are some excellent hints in this little pamphlet, which are well worthy of the medical practitioner's attention.*

3. Hortus Medicus, or Figures and Descriptions of the more important Plants used in Medicine, or possessed of poisonous Qualities; with their Medical Properties, Chemical Analyses, &c. By GEORGE GRAVES, F.L.S, &c. and JOHN DAVIE MORRIES, M.D. Quarto, pp. 32, and 12 coloured Plates. No. I. 7*s* 6*d*. plain, 10*s*. 6*d*. coloured. A. and C. Black, Edinburgh, March, 1833.

4. A plain Statement of Vaccination; designed for the Heads of Families, wherein the History, Advantages, and Errors of this Subject are popularly treated. By A. B. C. Duodecimo, pp. 58. Renshaw and Rush, 1833.

☞ *This little brochure is very well calculated to effect the purpose for which it was compiled.*

5. Principles of Pathology and Practice of Physic. By JOHN MACKINTOSH, M.D. Lecturer on the Practice of Physic in Edinburgh, &c. Two Volumes, 8vo, 3d Edition, 1833.

☞ *This third Edition has been considerably enlarged—every sentence has been reconsidered, and many errors have been corrected. It may now be considered as the most standard work of the kind in the English language.*

6. A Treatise on the Venereal Disease and its Varieties. By WILLIAM WALLACE, M.R.I.A. &c. Surgeon to the Jervis Street Infirmary, Dublin, &c. Octavo, pp. 382. Burgess and Hill, April, 1833, price 12*s*. bds.

7. Succinct Practical Observations on the Effects of Bloodletting, &c. By ED. GEO. GEOGHEGAN, M.R.C.S. I. Octavo, pp. 60. Longman's, April, 1833.

8. Illustrations of the Mechanism of Parturition. By CHARLES EMILIUS ROSS, A.M. M.B. Quarto, six Plates, lithographed, with numerous Figures.

☞ *These Plates, which are very cheap, will be found extremely useful to the obstetric student.*

9. The Principles and Practice of Obstetric Medicine. By D. D. DAVIS, M.D. &c. Part XIX. Taylor, London, May, 1833, price 2*s*.

10. An Address to the Governors of the Birmingham Hospital, on the Appointment of Assistant Surgeons to that Institution. By RICHARD MIDDLEMORE, M.R.C.S.

11. A Manual of Pharmacy. By WILLIAM THOMAS BRANDE, F.R.S. &c. Third Edition, corrected and enlarged. Octavo, pp. 544, price 14*s*. May, 1833.

☞ *This highly valuable Work is greatly enlarged and improved, so as to constitute a standard production. It may be considered, in fact, as the substance of the annual Course of Lectures delivered by the author at Apothecaries' Hall.*

12. Observationes quædam de Entero-Helcosi. Dissertatio Inauguralis Medica quam gratiosi Medicorum ordinis Auctoritate in Academia Lipsiensi Summorum in Medicina et Chirurgia Honorum rite, &c. Auctor GULIELMUS EDWARDUS SWAINE, Londinensis, Medicinæ Baccalaureus. Quarto, pp. 31, with a Lithographic Plate. Leipsic, 1832.

☞ *This is a very respectable thesis on ulceration of the intestines, as connected with fever, &c.*

13. Graphic Illustrations of Abortion, and the Diseases of Menstruation; consisting of twelve Plates, from Drawings engraved on Stone, and coloured by Mr. J. Perry, and two Copper Plates from the Philosophical Transactions, coloured by the same Artist; the whole representing forty-five Specimens of aborted Ova, and adventitious Productions of the Uterus, with preliminary Observations, Explanations of the Figures, and Remarks, Anatomical and Physiological. By A. B. GRANVILLE, M.D. F.R.S. &c. Physician-Accoucheur to the Westminster General Dispensary, &c. Quarto, pp. 51, with numerous coloured Plates, price, by Subscription, £1. 15*s*. June, 1833.

14. Observations on the Testicles. By JAMES RUSSELL, F.R.C.S. late Regius Professor of Clinical Surgery in the University of Edinburgh. Small 8vo, pp. 276. Longman and Co. May, 1833.

15. Hortus Medicus; or Figures and Descriptions of the more important Plants used in Medicine, or possessed of poison-

ous Qualities; with their Medical Properties, Chemical Analysis, &c. By GEORGE GRAVES, Fellow of the Linnæan Society, &c. and JOHN DAVIE MORRIES, M.D. &c. No. II. price 7*s*. 6*d*. plain, 10*s*. 6*d*. coloured. Black, Edinburgh, May, 1833.

☞ *A very meritorious enterprize.*

16. An Inquiry into the Causes of Respiration, of the Motion of the Blood, Animal Heat, Absorption, and Muscular Motion; with Practical Inferences. By JAMES CARSON, M.D. of Liverpool. Octavo, pp. 447, with a Plate. Second Edition, greatly enlarged, 1833.

17. Synopsis of a Course of Lectures on the Practice of Medicine. By CHAS. LENDRICK, M.D. King's Professor, &c. Ireland.

18. Introductory Lecture, addressed to the Students in the School of Physic (Dublin). By CHARLES LENDRICK, M.D. &c. Octavo, pp. 21. May, 1833.

☞ *A very sensible address.*

19. The Origin and Progress of the Malignant Cholera in Manchester. With an illustrative Chart. By HENRY GAULTER, M.D. of Magdalen Hall, Oxford. Octavo, pp. 206, with Chart. June, 1833.

☞ *This is one of the most able pamphlets on cholera which we have seen. The author advocates, we may say* proves, *the local or spontaneous origin of cholera in every part of the globe, as well as in Manchester; while he admits the possibility of the disease being sometimes communicated from individual to individual.*

20. Principles and Practice of Obstetric Medicine, &c. By Dr. DAVIS. Part XX. with Plates. June, 1833.

21. Principles and Illustrations of Morbid Anatomy, adapted to the Elements of M. Andral's, and to the Cyclopædia of Practical Medicine, &c. By J. HOPE, M.D. Parts IV. and V., price 8*s*. 6*d*. each.

☞ *These two Parts are occupied with diseases of the liver, and the plates support the reputation of the preceding fasciculi.*

22. Sketches from the Case-Book, to illustrate the Influence of the Mind on the Body, with the Treatment of some of the most important Brain and Nervous Disturbances which arise from this Influence. By R. FLETCHER, Esq. Surgeon to the Gloucester General Hospital. &c. Octavo, pp. 391. June, 1833.

23. Some Observations on a Letter from Dr. N. Chapman, of Philadelphia, to Dr. W. B. Tyler, on the Subject of Cholera, as appearing in Philadelphia, August, 1832. Octavo, sewed, 1833.

24. Some Observations on the Subject of the Jalap Plant. By J. R. COXE, M.D. Octavo, sewed, pp. 20.

25. Observations on the Illusions of the Insane, and on the Medico-legal Question of their Confinement. Translated from the French of M. Esquirol. By WILLIAM LIDDELL, M.R.C.S. Octavo, pp. 89. Renshaw and Rush, June, 1833.

26. Instituicoes de Medicina Forense. Par JOSE FERREIRA BORGES. Octavo, pp. 570. Paris 1832.

☞ *This appears to be an able compilation, in the Portuguese language, on the subject of forensic medicine. The author, we understand, resides in London.*

27. The Calamities of Genius illustrated, by referring the Anomalies in the Literary Character to the Habits and Constitutional Peculiarities of Men of Genius. By R. R. MADDEN, Esq. Author of Travels in Turkey, &c. Small 8vo, two Volumes, June, 1833.

☞ *This is a medical work, notwithstanding its title, and an extremely amusing one it is. It traces the influence of bodily disorder on the mind and temper with great ability, and illustrates it by appropriate examples. We shall review the work in our next.*

28. The Analysis of Inorganic Bodies. By J. J. BERZELIUS. Translated from the French Edition, by G. O. REES. Small Octavo, pp. 164. London, June, 1833.

29. A Treatise on some Nervous Disorders: being chiefly intended to illustrate those varieties which simulate Structural Disease. By EDWARD LEE, M.R.C.S. and formerly House-Surgeon of St. George's Hospital. 8vo. pp. 152. Burgess and Hill, June, 1833.

THE

Medico-Chirurgical Review,

No. XXXVIII.

JULY 1 to OCTOBER 1, 1833.

I.

Observations on Injuries and Diseases of the Rectum. By *Herbert Mayo*, Esq. F.R.S. Surgeon of the Middlesex Hospital. Octavo, pp. 220. Burgess and Hill, London, 1833.

We need not introduce Mr. Mayo to our readers; he is sufficiently and favourably known to them already. Neither need we say much on the subject which he has selected. We believe that the profession are generally of opinion, that it is one very capable of further elucidation than it has received, and that much uncertainty, if not obscurity, still hangs about it. When we add to this consideration, the circumstance of many insulated facts and valuable papers on particular affections of the rectum having been published within these last few years, we may fairly admit that a work which shall embody all that is now known, and contain, in addition, some novel reflections or suggestions, some original practical hints, and some new modes of viewing established facts, is not undeserving of attention. We think no further preface necessary, but shall proceed at once to the examination of Mr. Mayo's work.

It is divided into eight chapters, treating severally of fissure and laceration of the rectum—of protrusion of the bowel—of hæmorrhage and pain—of piles—of fistula—of constipation and the use of instruments—of stricture of the rectum—and, finally, of cancer of the rectum. On some of these subjects, little, probably, can be said that is new; but, in others, there is much scope for original remark, and for useful improvements in treatment.

I. Of Laceration of the Rectum.

This chapter embraces not only laceration of the rectum, but ulceration of the gut also, affections not necessarily connected with each other. Mr. M. observes that it is surprising that laceration is not more frequent, in consequence of the thinness of the parietes. Mr. M. relates two cases.

Case 1. A lady, after her confinement, had great irregularity of the bowels, which seldom acted without medicine, and then with much pain. On one of these occasions something appeared to give way, and a sense of exquisite soreness at one part of the rectum was superadded to her former

sufferings. On examining the bowel, Mr. Mayo found a small transverse fissure in the lining membrane, at the back part of the bowel, immediately within the sphincter. There was a little hardness round it, and it was acutely sensible. The bowel above was large and relaxed, and contained at the time a considerable volume of fæcal matter.

"I recommended that the bowel should be immediately washed out with warm water, by which means its contents were brought away: that every morning the injection of warm water should be repeated, with the object of completely unloading and relieving the rectum daily: and that at night a mild mercurial ointment should be applied to the fissure of the mucous membrane. By steadily pursuing this plan, the lady in a short time recovered. Occasionally, since her recovery, when the action of the bowels has become irregular, she has been threatened with a return of the complaint; but, upon resuming the use of the remedies by which the part was before restored, she has in each instance found the uneasy sensations cease." 4.

In the second case there was a fissure, but no history, so far as we can see, of laceration. The patient, a gentleman, got well by taking every night a grain of blue-pill, with three of compound extract of colocynth, and applying the mercurial ointment as in the former case. Mr. Mayo's principle of treatment, in these cases, is to keep the bowels properly open, and to apply mercurial ointment. We suppose that, if the former requisite be attained, any moderately-stimulating application would answer as well as the mercurial ointment.

Ulcer of the Rectum.

This may or may not originate in laceration. When neglected, the complaint is serious and difficult to manage. There is great pain; mucus, purulent matter, and occasionally blood are discharged with the fæces, and some extent of ulcerated surface is felt upon examination. We would observe that the ulcer is usually at the posterior part of the gut, opposite the os coccygis, that it is frequently small, and circular, that it is recognized by the extreme pain produced by the finger of the examiner touching it, and that usually a little blood follows the examination.

Mr. Mayo recommends the remedies directed for the preceding affection —leeches to the mucous membrane at the anus, if the pain be severe, and suppositories of opium or belladonna—the application of lunar caustic to the ulcer. If these means fail, Mr. Mayo advises that the sphincter and the ulcer be divided by a vertical incision with a bistoury or a scalpel, the edges of the incision being temporarily kept apart by lint introduced into the wound. As this plan of treatment must be familiar to most of our readers, we need not stop to notice a case brought forward by Mr. Mayo. In the Number of this Journal for January, 1831, will be found the substance of some observations on ulcer of the rectum, by Mr. Colles, in which that able surgeon describes the affection with great accuracy, and gives ample directions for the division of the ulcer.*

We believe, however, that simple division is not always successful. Mr. Brodie, investigating this subject with his usual patience and acuteness, has come to the following conclusions on this subject. Division of the ulcer and

* See Journ. cited, pp. 223 and 224.

sphincter is useful by the rest which is thus given to the former. But the sphincter muscle is not exactly circular, but arises from or is virtually attached to the os coccygis behind, whence its fibres proceed on either side of the extremity of the gut to the tendinous line in front, where it meets the perinæal muscles. Now the fixed points being behind and before, a vertical incision in the median line posteriorly, may not divide the muscular fibres, or, at all events may not so divide them as to prevent their action. The ulcer of the rectum is usually in the centre, over the os coccygis. Hence Mr. Brodie makes two incisions, one through the ulcer and one upon the side of it. By these the effectual division of the muscle is ensured, and, at the same time, the benefit of a division of the ulcer itself, if there be any, is obtained.

It is well to know, that ulcer of the rectum may occasionally become a cause of death. In a patient whom we saw, a gentle examination appeared to bring on enteritis, the result of which was fatal.

Complete Laceration of the Rectum.

Mr. M. relates a case of this kind.

"————, ætat. 40, naturally of a very constipated habit of body, and at the time being on a journey, on striving to relieve the bowels, which had not acted for many hours, felt something give way, to use her own expression, and on the following morning some fæces passed *per vaginam*. On examination by the vagina and rectum, a transverse rent was found two inches within the parts, sufficiently large to admit the end of the finger. The only treatment adopted in this case consisted in frequently and carefully cleansing the part by injections of water, and regulating the state of the bowels by proper medicines. The patient entirely recovered. In five weeks the fæces had ceased to pass per vaginam." 13.

If the opening shews no disposition to contract, the nitrate of silver, or some other escharotic may be employed, in combination with an elastic gum pessary. We see nothing deserving of attention in Mr. Mayo's observations on recto-vaginal fistula. He says nothing of the application of the actual cautery in these cases. Many think highly of it.

Mr. Mayo relates a case, of which we have seen several examples. A young man presented himself with dark diffuse inflammation, tending to sloughing of the perinæum, scrotum, and penis. Six weeks previously, after costive bowels, he had a looseness, and a lump seemed to him to have formed in the perinæum. In two days afterwards the swelling of the scrotum and penis had begun. A deep incision was made, we presume by Mr. M., in the perinæum, and the fluid which flowed had a fæcal odour. In a few days fæcal matter began to escape through the wound, establishing the certainty of a communication between the perineal cellular tissue and rectum. Mr. Mayo seems doubtful whether this was a case of laceration of the rectum, or abscess external to it in the first instance. We have seen four or five cases of this description, two, if our memory serves us, fatal. They appeared to be owing to abscess external to the gut, penetrating the latter, and giving rise to sloughing of the cellular membrane consecutively. It is not uncommon to find a fish-bone or some foreign substance in these deep, foul, perineal abscesses. We think we have heard Mr. Brodie relate some very remarkable instances of this kind.

Mr. Mayo observes that the rectum may be torn through by violence in

the introduction of instruments, as enema-tubes, within it. At Bartholomew's Hospital there is a preparation from the body of a patient whose death had been occasioned by the injection of a pint of water-gruel into the abdominal cavity through the torn rectum. We have heard of two or three instances of laceration of the rectum by a glyster-pipe. They occurred in a hospital.

Mr. Mayo observes that the most frequent lacerations of the rectum are those which occur from the pressure of the child's head in labour. These are alluded to in all works on Midwifery, and we need only advert to a method employed by Mr. Copeland in a case of complete laceration of the perinæum and sphincter. He divided the sphincter laterally, and the laceration was cured. The principle is obvious. Acting on this hint Mr. Mayo operated in a case which occurred to him soon afterwards.

Case. The woman had been delivered eight days previously, and the fæces passed freely through the vagina by a gaping fissure nearly an inch in length.

"As the edges of the fissure were not cicatrized, I thought the present a very favourable opportunity for repeating Mr. Copeland's operation. To give the parts every chance, I divided the sphincter muscle upon both sides, performing therefore on either side the operation for fistula ani. A small strip of lint was introduced into each wound. The edges of the original rent were afterwards washed daily with a solution of nitrate of silver, and fresh lint was replaced in the incisions as often as it was removed by the passage of fæces. The original rent healed very speedily: when it was nearly closed, the lateral wounds were allowed to unite. In five weeks from the operation the incisions had healed, and the patient had recovered the use of the sphincter. She has continued perfectly well to the present time, and was safely confined of another child in November, 1832." 25.

In cases of long-standing Mr. Mayo intends to employ this method in combination with paring of the edges, ligatures, &c.

II. OF PROTRUSION OF THE RECTUM.

This, which is commonly known by the term prolapsus, or procidentia recti, is a troublesome affection, and has excited the attention of several able surgeons. Mr. Hey, Mr. Copeland, M. Dupuytren, and more recently Mr. Fletcher, have severally written papers on the subject, each proposing some modification of the operation of excision of the ligature. We confess that we see little to arrest us in this chapter of Mr. Mayo's.

He remarks that costiveness is a frequent cause of the affection—that it is more common in children than in adults, in consequence of the greater mobility of the bowels in the former—that the remedy consists in the reduction of the gut and the insurance of regularity of the bowels by proper treatment—that in severe cases, especially adults, an operation is necessary—that prolapsus is occasionally attended with piles, or with thickening of one or more folds of the mucous membrane, and that, in such instances, the removal of the excrescence must be the first object—and that prolapsus when slight, is most apt to be mistaken for piles. This is the gist of the chapter, and our readers may perceive that it contains little that is new.

We will notice two or three of the cases related.

1. *Prolapsus in Children.* "I attended two children in another family, the one three, the other four years of age. Both laboured under eversion and protrusion of the bowel, which took place at each motion, and required pressure to replace it. These children were of a delicate habit, but with each the bowels acted for the most part with regularity.

The method which I adopted with success in these cases, consisted in giving tone to the part by means of astringent injections. For the youngest, which was a girl, I prescribed two ounces of the infusion of catechu as an enema, to be used daily; for the elder, a boy, I ordered three ounces of the same infusion, with six grains of acetate of zinc. The remedy was administered in the morning, before the children rose; and they were kept in bed for half an hour afterwards, in order that the injection might be retained. Both the children recovered under this treatment; the protrusion of the bowel being at first lessened in quantity, and then in frequency, till the children would pass two or three days without its recurrence. Occasional doses of opening medicine were given when necessary during the four or five weeks that the plan which I have described was pursued." 38.

2. *Prolapsus—Operation performed.* A young lady, aged 20, had suffered from head-ache, &c. for several years, when Dr. Chalmers, of Croydon, suspected some affection of the rectum, and ascertained that she had prolapsus of considerable volume, which took place after every stool, and could not be replaced without difficulty. Mr. Mayo was called in. He found, after giving an enema, that the prolapsus was about the size of an orange, the coats of the bowel not at all thickened, the sphincter extremely lax, the eversion commencing about an inch within it. The operation performed was the following.

A small fold of intestine was pinched up with forceps, and tied with a silk ligature; care was taken to include the mucous and submucous coats alone in the ligature; the whole surface included was less than that of a sixpence. Before finally tightening the ligature, the surface of the little fold was cut with scissors. Three such folds were tied upon opposite aspects of the bowel, and at different distances from the sphincter. The patient hardly felt the operation, so small is the sensibility of the internal parts of the body, unless when inflamed. The parts were then replaced. During the four days which followed the operation, the patient was not allowed to sit up; and the bowels, which had been well unloaded before, were kept confined, very light and moderate liquid nourishment alone being allowed, and an enema of laudanum having been administered. On the fourth day slight prolapsus recurred, but was replaced with less difficulty than before. On the sixth day the parts were examined. The mucous membrane, when the bowel was extruded, appeared fuller and more loaded with blood than before the operation. The little portions of membrane which had been tied had come away; but the ligatures had not yet separated, but remained fixed in the shallow ulcers which they had produced: they were removed. From this time improvement made progress daily, and in a fortnight the prolapsus had disappeared.

3. *Protrusion with Inflammation, &c.* E. R. æt. 65, had been subject for sixteen years to occasional prolapsus, which he could always reduce without difficulty. He was admitted into the Middlesex Hospital, the gut

having been down for eighteen hours. It was of the size of a large walnut, swollen, of a scarlet colour, painful and extremely tender, so that he could not bear it to be pressed. The practice therefore pursued was the following. Leeches were applied to the mucous membrane of the bowel, and afterwards an anodyne poultice; and a dose of opium and calomel was administered. The following morning the tenderness of the bowel was greatly diminished, and it was returned without difficulty.

Mr. Mayo, in this notice of prolapsus, says nothing of two means of treatment which appear to us extremely important; we allude to the horizontal posture, and the Ward's paste. We have seen very lately a case of prolapsus, much more extensive than that of the young lady on whom he operated, remedied by these measures. We have one word to say on the exhibition of the paste; it should not be given when the bowels are constipated, or when there is much irritation, or any pyrexia. But after the bowels have been got into a healthy state, and irritation has been removed, we have certainly seen much benefit derived from this excellent medicine. We would refer our readers for further remarks on the surgical treatment of prolapsus to the memoirs of M. Dupuytren, and of Mr. Fletcher. The latter will be found in the number of this Journal for October, 1831.

III. OF BLEEDING FROM AND PAIN IN THE RECTUM.

The former, Mr. Mayo avers, occurs, as well as the latter, as a substantive disease. We think that with respect to the former Mr. Mayo is somewhat illogical, for, immediately after this declaration, he makes it depend on congestion of the venous system of the abdomen, or obstruction in the circulation through the liver. If it depends on congestion only, it is obvious that it is not the disease but the symptom. If, on the other hand, it depend on enlargement of the hæmorrhoidal veins, it is still merely the symptom, and the latter is the disease. It appears very evident to us that bleeding can, under no circumstances, be considered a substantive disease. There must be a cause for it, and that cause is the disease. We make these remarks, because it is always better to discard these erections of symptoms into diseases. It is astonishing what error the ancient disposition to give names to symptoms has caused and has perpetuated. Asthma is a case in point.

"An ordinary attack of bleeding from the rectum has the following course. There is a sense of weight, heat, fulness, and general uneasiness in the bowel: this goes on increasing for twenty-four hours: then the patient observes that when the bowels act, part of the discharge is liquid; it consists of blood, which seems poured out at the time only that the bowels act; or the passage of the fæces seems necessary to rupture the small vessels from which the hemorrhage proceeds. In another day the uneasy sensations lessen, and they quickly cease altogether." 49.

Such hæmorrhage from the rectum Mr. Mayo considers a relief to the system, and a warning that something is wrong. Mr. M. recommends gentle aperients and cold bathing during the attack, and remedying what is wrong, to prevent its recurrence. But, says Mr. Mayo, when discharge of blood continues very long, it weakens the system, and then a different plan must be adopted. To illustrate this, he relates the following case, which we will give entire.

"James Tucker, ætat. 24, was admitted into the Middlesex Hospital, Oct. 6, 1829. During the three preceding months he had habitually passed blood by stool: at first he was considerably reduced in strength by this discharge, but afterwards it affected him less. The quantity of blood lost was greater at first than afterwards: at the period of his admission it amounted to two or three table-spoonfuls, which came away immediately after each evacuation. The only pain complained of was occasional numbness and aching down the inside of the thighs. This patient was directed to use an astringent enema containing ten minims of laudanum after each discharge of blood.

The effect of the injection was to constipate the bowels, and to produce a dull pain at the sacrum. The astringency of the injection was therefore lowered, and the laudanum omitted, and a few grains of blue-pill and extract of rhubarb were ordered to be taken every night. The discharge of blood gradually lessened; and on the 26th the patient left the hospital cured." 52.

In this case there is one great omission. No mention is made of the state of the rectum. It is only half a fact. But the whole subject appears to us to stand on a false bottom. Bleeding is trifling in its consequences or severe, according to the cause that produces it. We know a gentleman who is affected with hæmorrhage in precisely the manner Mr. Mayo describes. But that gentleman has enlargement of the hæmorrhoidal veins, and whatever tends to act injuriously on them tends to produce the bleeding. Again, a patient will not have long-continued bleeding without an adequate cause. What is that cause? That can only be ascertained by inquiry and examination. It may be ulceration of the colon or rectum, or internal hæmorrhoids, or some other affection. As examination alone can decide this point, so, without such examination, all treatment must be empirical—a shot in the dark. The erection of the symptom bleeding into a disease tends to such empiricism. We would recommend practitioners to be always sceptical in this admission of symptoms—to believe there is always a local cause for them—and to endeavour to detect that cause. How often have surgeons been deluded by the term typhus, and stood by while their patients were dying of unlooked-for and consequently unfound putrid abscesses.

Pain in the Rectum. Of this, unattended with discoverable local disease, Mr. Mayo has seen but two examples. These we will extract.

"A gentleman, about 40 years of age, sent for me during a paroxysm of pain in the rectum, but it had subsided before I saw him. He told me that two or three times a year he was liable to this seizure, which was not, that he had observed, connected with the state of his bowels, or with his habits of living. The pain which he used to experience was intense, and would last half an hour. He was not, that he knew of, liable to lose blood by stool, nor had he ever suffered from piles. Upon examining the rectum, I could discover no disease in it. The pain did not appear to arise from spasm of the sphincter.

I attended a patient with Mr. Stevenson, of the Edgeware Road, who suffered from pain in the rectum. Something less than two years before this, he had a syphilitic ulcer upon the penis, for which he had taken an unusually large quantity of mercury, owing to the difficulty of producing sensible mercurial action in his system. The ulcer however healed; but while he was recovering, and his system was yet charged with mercury, he began to experience aching pains in the incisor teeth and in the rectum. The sense of aching in the teeth and in the rectum was not constant, but would come on frequently during the day without any assignable cause. It had lasted a year and a half, during

which he had remained perfectly free from symptoms of lues. This patient, who was otherwise in good health, suffered his mind to be greatly distressed by the continuance of the neuralgia. He was anxious to try every plan which held out the least promise of benefiting him. But of all the remedies which he tried he appeared to experience relief from one only, which was a course of sarsaparilla." 57.

The fourth chapter, occupying forty-two pages, is devoted to the consideration of piles. There is little novelty in Mr. Mayo's remarks on this affection. For internal piles he prefers the ligature to excision; he operates in the usual manner. The following case of external piles may be related.

" A physician whom I had attended for inward piles came from the country to consult me for such an attack as that which I have described. He had used the remedies which have been recommended, having applied leeches several times, and having been cupped upon the sacrum, and each time with relief; but there remained a tumour of the size of a chesnut on one side of the bowel, which was still painful on pressure, and he was in hopes that an operation would relieve him. Before he saw me, after he arrived in London, he met, and the part was examined by, a surgeon of considerable experience, who told him that he could if he please return the tumour within the sphincter, but that the pressure necessary would give considerable pain.

The appearance which the part presented was that of a solid tumour on one side of the anus extremely firm, partly covered with tense and shining integument, partly with the mucous membrane of the margin of the bowel. On examining the rectum, the swelling and hardness were found to extend an inch within it. It was evident that no operation would be of service; and that as the tenderness and pain in the part, though still considerable, were progressively lessening, no treatment would be necessary beyond the use of a poultice, and occasional doses of opening medicine, with abstinence from wine and heating food. The tumour I concluded to be an outward pile, no part of which would on its diminution be drawn or forced within the sphincter. The result proved that this opinion was right: the tumour only shrunk." 87.

When an external hæmorrhoid is very painful, elastic, tense, and throbbing, Mr. Mayo punctures it. Under other circumstances, fomentations and leeches, if necessary, are sufficient during the paroxysms of exacerbation to which both internal and external piles are subject. External piles should be removed by excision, if removed at all.

Mr. Mayo describes, as a variety of external piles, what, if we understand his description rightly, do not appear to be piles at all.

" The cases I mean are of the following description. Some soreness is felt of the skin about the anus, which gradually increases. When the part is examined, two or three red circular elevations of the skin are seen, from three to four lines in diameter. They are attended with heat and soreness. If neglected they sometimes ulcerate. They commonly get well under the use of mercurial applications, joined if necessary with mercury, administered internally. I do not know whether this affection which I have seen several times, and with one exception in women only, is of a venereal origin. I have not seen it in connexion with other symptoms of lues. But in one instance, in a woman forty years of age, it existed at the same time near the anus, and in the axilla. The complaint had begun in the first situation, and I have no doubt it had been transferred to the axilla by contact.

I saw the same affection in a child two years of age, a boy. In this case mercurial applications irritated the part, which got well under the use of the

zinc ointment. In this case there were originally two blotches, one of which became ulcerated, and the skin beside it grew into a pendulous slip, distinctly caused by the irritation of the neighbouring ulcer. As the original complaint got well, the slip of skin shrunk again and disappeared.

When these little folds of skin originate from a local cause of irritation, they generally go away spontaneously: sometimes they shrink and disappear; at other times they perish by ulceration. The most common causes of their production are gonorrhœa or leucorrhœa, when insufficient attention is paid to cleanliness." 98.

Now these productions of cutis are of every day's occurrence, and may be seen at any time in Lock Hospitals. They are usually known in these establishments by the name of condylomatous elevations and condylomatous sores, although they do not answer exactly to ordinary descriptions of condyloma. They are totally distinct from hæmorrhoids, for the latter originate in congested veins, whereas these are always vascular productions of the cutis, highly organized, and the result of cutaneous irritation. We have under our observation, at the present moment, at least half a dozen of these cases, and we feel surprised at Mr. Mayo's having seen so little of the affection.

We have said that they are the result of cutaneous irritation, and any discharge, with want of cleanliness, is sufficient to produce them. They are frequently the result of gonorrhœa or of leucorrhœa, as Mr. Mayo has remarked, but they are also, in many instances, a distinct syphilitic primary symptom, capable of communication, and followed by secondary symptoms, usually enlarged tonsils, with superficial ulceration, and the syphilitic psoriasis, lepra, tubercle, or stain.

When syphilitic, these productions require mercury.

The fifth chapter is on fistula ani. We do not believe that much of novelty can be said on such a subject. We need only allude to one or two insulated passages. Mr. Mayo gives the following symptomatology of deep-seated abscess near the rectum.

"It is to be suspected, when the patient experiences aching and throbbing pain in the part, often not constant, but recurring at intervals, and frequently with a spasmodic character, the pain being aggravated on the passage of the fæces, and the complaint attended with symptomatic fever. The abscess often does not declare itself by any external fulness or prominence; and its existence can only be ascertained through an examination of the rectum; when, at some part which is more tender than the rest of the mucous surface, a fulness and fluctuation, if the abscess is matured, are felt." 104.

Mr. M. recommends, as all have done, an early opening of these deep-seated abscesses. Indeed, if there is reason to believe that matter is forming by the rectum, Mr. M. advises that the inflamed part should be punctured deeply with a lancet, even if no fluctuation can be felt. In illustration of the relief experienced from this practice, Mr. Mayo relates a case.

The patient was a young lady, and there was general fulness of the nates on one side, towards the anus. The lancet was introduced to some depth, but blood only followed; it was passed still deeper, and a little matter escaped. The patient was relieved, and soon recovered.

Mr. Mayo relates a case of abscess within, or close to the prostate, opening into the bowel.

"Wm. Knight, ætat. 65, was admitted into the Middlesex Hospital, August

9, 1832. For five months previously, he had experienced violent aching pain about the hips and loins, and down the back of the thighs to the knees, slig dysuria, and habitual constipation of the bowels. During the last six weeks I had suffered more acute pain within the anus, shooting to the projections of t ischia and round the haunch bones. He passed urine with great difficulty, a could scarcely void it unless at the same time he strove to empty the bowel Upon examining the rectum, I found a collection of fluid in the region of t prostate gland. This patient experienced relief from the use of the hip bat with an opiate suppository at night, and mild aperient medicines. But in f days after his admission, the abscess broke into the rectum, discharging as I thought a pint of matter, which was followed by the complete removal of all h symptoms, and a very speedy recovery. He left the Hospital perfectly well c the 28th of September." 111.

For an abscess to do well, matter must escape from its cavity freel Mr. Mayo remarks that this is not to be effected so much by a large ope ing as by several independent situations. This, however, must be entire determined by the circumstances of the individual case.

Mr. Mayo denies that it is the action of the sphincter that prevents t cure of the fistula ani. He maintains that this sinus shews no more indi position to heal than any other sinus in cellular membrane. But, as M Mayo allows that the action of the sphincter is very operative in preventin the healing of lacerations of the rectum, and of ulcers of the gut, it appea to us that he cannot, with any grace, deny its action in fistula. If it ac injuriously in one instance, there is no good reason why it should not a in another.

If fistula ani be complicated with urinary fistula, the patient, observ Mr. M. may be cured, if he has a good constitution. The plan recommen ded is to close the urinary fistula first, " which may often be done by regu lated diet and medicine alone, unless there is stricture of the urinary canal. When this is closed, then the fistula ani may be cured by the common ope ration.

The sixth chapter treats of constipation of the lower bowels, and of th use of instruments.

Mr. Mayo observes that constipation may depend on one or other of thes three causes. Either the secretions are wanting, of which, combined wit the refuse of the aliment, fæces are formed; or, fæces being formed, thes is not liquid secretion enough for their expulsion; or, the fæces being of proper quantity and consistence, either they are not of a quality to stimulat the bowels to action, or the muscular fibres of the bowel being enfeeble have not force enough to expel them.

Mr. Mayo relates a case of what he styles want of fæces, and of the con sequences which result when the blood is not relieved from this excretion We will give it entire.

" A young gentleman, ætat. 25, consulted me, labouring under the followin symptoms. He complained of being oppressed with languor, and describe himself as incapable of any effort mental or bodily. Frequently during the da he was drowsy and disposed to sleep, and at night he slept long and heavily He considered that these symptoms, under which with certain intermissions an with variations in their degree he had laboured for several years, depended upo constipation of the bowels. If it happened that the bowels were well re lieved in the morning, the oppression which he suffered seemed for that da lightened of half its weight. In the preceding autumn he had been in the coun

try taking considerable exercise daily. At that time the action of the bowels had been regular, and he had felt himself perfectly well.

For two months before I saw this patient, he had been endeavouring, by means of medicine, to make up for the want of bodily exercise. He had used injections, but they seldom brought away fæces: he had taken various medicines, but they had generally produced watery motions, which used to lower instead of relieving him. His tongue was clean, his appetite good. There was no embarrassment in the early stages of digestion; no sense of weight or uneasiness at the stomach; no acidity, distension, or flatulence, after his meals. The only bodily sensation which he complained of, was a sense of uneasiness about the middle of the belly. This uneasiness was greatest, when the bowels were most confined: at such times he could not draw himself fully upright without pain about the umbilicus, which was increased by pressure.

This patient recovered his health upon taking a course of medicine, which produced daily a full action of the bowels. The medicine which most contributed to this purpose consisted of equal parts of scammony, gamboge, aloes, and the compound extract of colocynth." 127.

We confess that we are not convinced of there having been a want of fæces in this case. What was wanted was the power of getting rid of them. This gentleman took little or no exercise, and had a good appetite. What did he with his food? The excrementitious part must have become excrement—it was not voided—where was it? The fact is, that this gentleman's colon was loaded, and all that was necessary was to empty it, and prevent its being loaded again.

Mr. Mayo criticises, and we think very fairly, Dr. O'Beirne's statement, that fæces are seldom found in the rectum. Whoever has had occasion to examine the gut often, must have found upon his finger very unequivocal marks to the contrary.

Mr. M. remarks that constipation may arise either from the fæces not stimulating the bowel, or from the muscular coat of the latter being weakened or palsied. Deficient biliary secretion will produce the former.

Accumulation of fæces in the great intestine, in elderly women, often has its seat in the rectum, and relief is obtained from emptying the bowel mechanically. Mr. M. relates a case of this sort. If the accumulation be higher, a long flexible tube, as recommended by Dr. O'Beirne, may be serviceable. If the accumulation takes place beyond the reach of instruments, we must resort to drastic purgatives.

Sometimes constipation seems attributable to affections of the spine. Mr. Mayo relates an instance of this in a young lady. The lumbar portion of the spinal chord was softened for the length of two inches.

In the treatment of constipation, Mr. M. recommends punctuality in attendance at the water-closet—regular exercise—aperient medicine, if necessary, and the use of the bougie, injecting syringe, or lavement. Mr. Mayo is not very precise or very full in his remarks on these modes of treatment.

The two last chapters are on stricture of the rectum and cancer of the rectum.

Stricture of the Rectum.

Mr. Mayo thinks that no one part of the rectum is more disposed to spasmodic stricture than another. The cases he has seen have left him with the impression that the upper part of the rectum and the sigmoid flexure of the

colon, are liable to irregular contractions of their muscular tunic, capabl of obstructing the passage of the fæces and of making resistance to the in troduction of instruments. This irregular action is generally dependen upon a vitiated state of the secretions; and is more frequently relieved by regulated diet and alterative medicines, and the use of injections, than by th employment of instruments. Nevertheless the use of the bougie is some times beneficial in spasmodic contraction of the rectum.

Mr. Mayo relates the case of a physician who cured himself by takin nothing in the shape of food that could by possibility irritate the stomach or bowels, and leaving them to act of and for themselves, when they coul no longer retain their contents. The next case is probably, nay obviously not one of mere spasmodic contraction. As it is interesting we will giv it in the gentleman's own words.

"A gentleman, now in his fifty-eighth year, who from early youth had bee subject to a very irregular action of the bowels amounting frequently to a alternation of costiveness and dysentery, was about fifteen years ago strongly urged by a physician to abstain from medicine, and to let the bowels alone This experiment was tried with great resolution. In spite of much sufferin and increasing feverishness, the patient took no medicine for more than a week Inflammation however ensued. Intolerable pain in the abdomen, and simul taneous vomiting and purging, reduced him to an alarming state in the middl of the night. Skilful medical assistance was fortunately obtained without los of time, and the acute symptoms were subdued. The patient's general healt however grew worse. His bowels were never at rest. Acrid mucus was in cessantly formed, and frequently passed, leaving the sufferer in a state of grea weakness. Blood was sometimes observed in the mucus. Scarcely any thin was passed without great effort and pain. Spasmodic contractions of the rec tum were constantly attendant on every attempt to ease it. Great emaciatio and prostration of muscular power took place, as also restlessness at night amounting sometimes to the most painful startings from sleep. After a few ineffectual attempts to perform a cure, treating the case as one of liver derange ment, he confined himself to the use of the common purgatives for the paroxysm of the complaint, and of a small quantity of rhubarb and ginger before dinner for the daily symptoms. Though very slowly, yet he improved from year t year; but owing to the unsettled state of the bowels, he could hardly ventur out of his house. By the advice of a friend, he tried, about two years ago, th daily use of lavements by means of Read's syringe. He has used nothing bu tepid water. At first the lavement produced great nervous weakness; but thi symptom disappeared in a short time. At present he enjoys a certain degree o comfort and ease, which entirely depends on the use of the lavement early i the morning. From a local examination it has lately been ascertained, that th rectum is contracted to about half an inch diameter, at a distance of about fiv inches from its termination. The daily passing of a wax bougie, softened b heat, is attended with little or no pain. The distention of the contracted par by this mechanical means relieves the spasmodic contractions, which the patien frequently feels a little above the sigmoid flexure." 163.

Mr. Crosse, of Norwich, communicated a case to our author, of what wa supposed to be stricture of the rectum. Her medical attendant employe in no very gentle manner a firm bougie, and perforated the coats of th bowel at the sigmoid flexure. The patient died of peritonitis. On dissec tion the rectum was found to be capacious for an inch or two above the anus, but beyond this, for eight or nine inches, it was so contracted as to admit an instrument only half an inch in diameter, and its coats at the same time were very delicate and attenuated.

With respect to permanent stricture of the rectum, Mr. Mayo observes that in nineteen cases out of twenty it is seated within reach of the finger. The treatment recommended is, of course, the bougie, used with gentleness. Mr. Mayo observes that roughness may produce peritoneal inflammation, and that although the rectum at the part affected is not covered with peritoneum, yet there is so singular a consent between the pelvic mucous passages and this membrane, that it often inflames in consequence of roughness exercised upon them. We apprehend that Mr. Mayo has overstated this consent, and that the matter, if examined, will be found to stand thus. Injury done to the mucous membrane of the gut produces inflammation of that membrane, which extends by contiguity to the cellular tissue, and spreads along that tissue so as to implicate the peritoneum. This has been the case in three or four dissections which we have made. We have found the same thing occur with respect to the œsophagus. An ulcer of the œsophagus was mistaken for stricture, and a bougie was passed. It occasioned extreme pain. In a day or two afterwards the patient was attacked with typhoid symptoms and pleuro-pneumonia. She died. We examined her body, and found that the surface of the ulceration had been abraded by the bougie; that inflammation had extended from this to the contiguous cellular membrane, and had travelled along that membrane to the pleura and lung. We apprehend then that this consent between the mucous membrane of the rectum and the peritoneum, is, in the majority of cases, nothing more than the extension of inflammation.

Mr. Mayo remarks that, in some cases, the stricture may be divided with a probe-pointed knife, in addition to the use of the bougie: of course some cases are more adapted than others for this operation. Mr. M. says he would not recommend it, "except under peculiar circumstances." What those circumstances are he does not say. The narrow stricture, not easily dilatable by the bougie, is, on the whole, best adapted for this operation. There is, at the present time, in St. George's Hospital, a woman with such a stricture. It is seated about two inches from the anus, and forms little more than a narrow ring. It has been treated by bougies for six months ineffectually. In such a case division of the stricture is likely to be very serviceable.

Mr. Mayo relates a case illustrative of the difficulty sometimes experienced in distinguishing stricture from incipient carcinoma.

"A lady about forty-five years of age had suffered severely from piles, which were removed five years ago by the ligature. They did not grow from the fore-part of the rectum. Some months after this the lady began to feel a tightness and sense of obstruction in the rectum. These sensations gradually became more distressing: much effort and straining were necessary to pass the fæces, which were narrow, flattened, and in fragments. After two years of suffering, this patient consulted me. There was an induration, which began two inches within the rectum, and occupied two-thirds of the circumference of the gut. The central and broadest part of the induration was towards the vagina; at this part it was two-thirds of an inch in depth. The part was acutely sensible. I recommended that the bowels should be relieved every morning by means of a lavement of tepid water, and that a soft wax bougie should be introduced into the narrowed part every second day. Under this treatment, combined with the occasional use of aperient medicine, a decided amendment took place: the narrowed part yielded to a certain extent, and there was a proportionate alleviа-

tion of all the symptoms. But in a short period the patient became worse again; the introduction of the bougie now gave more pain; it was therefore discontinued. The passage was indeed certainly freer, but the induration towards the vagina was not lessened. Under these circumstances I wished Mr. Copeland to see the case with me. The impression which the examination made upon our minds was, that the disorder was likely to prove carcinoma.

The plan which the patient followed was slightly modified. The use of the bougie for a time was not resumed. The increased sensibility of the part went away. But it was not long before the patient again complained of the contraction returning; upon which the bougie was again used, but for a shorter period than on the first occasion. Since then at intervals the patient has occasionally had recourse to this remedy again. She is now materially better: the narrowing has lost its doubtful character: the induration is less in extent, and the projecting band has little more than the character of a thickened fold of mucous membrane. Some discharge of matter *per vaginam* took place, and continued for several weeks, about a year ago. I am disposed to think that it proceeded from the induration, which may have suppurated, and the abscess have broken into the vagina at that time." 177.

Mr. Mayo mentions that ulceration may take place above the stricture, in consequence of the pressure exercised by the fæces. Mr. M. relates two cases of stricture at the sigmoid flexure, communicated to him by Mr. Cæsar Hawkins. He adverts also to an affection described by Mr. Chevalier and Mr. Earle. The rectum having been dilated by large fæcal accumulations, the upper portion of the gut is liable to become invaginated within it, and the portion thus prolapsed may become inflamed, thickened, and indurated, while the aperture through it is contracted. A careful examination is necessary to detect this state, and regulated diet, gentle aperients, the mildest injections first, and astringent injections afterwards, with the use of the bougie, are the means most likely to succeed.

The next affection is thus adverted to by Mr. Mayo.

"Spasmodic contraction of the spincter is a kind of cramp. It often comes on suddenly. The patient who has gone to bed quite well, awakes in violent pain. The spincter muscle is hard and in strong action, so that the finger cannot without great difficulty be passed into it. In some cases these paroxysms recur daily, in others only two or three times a year. In some the attack comes on gradually, and after producing uneasiness for several days gradually wears off; in others it is sudden in its invasion, and sudden in leaving the patient.

This complaint generally depends upon a confined state of the bowels; and a brisk cathartic at night, with an aperient draught in the morning, will often relieve it. In some cases the patient finds it sufficient to use a lavement of warm water, upon which the spasmodic contraction wears off.

If the pain is very severe at night, an ounce of tepid water, with twenty drops of the liquor opii sedativus, may be injected into the bowel, and at the same time purgative medicine taken. It is better to use opium in this form than as a suppository. In the latter shape, the remedy by the mechanical irritation which its presence excites has a tendency to excite the sphincter to stronger action.

Sometimes the spasm is relieved by extending the circular sphincter muscle and keeping its fibres on the stretch. The patient for this purpose may introduce a large mould candle into the anus.

There are cases in which this disease produces long-continued and most serious suffering; in which the anus becomes permanently contracted and hardened, constituting therefore a permanent stricture, and generally combining both permanent and spasmodic contraction. The motions are passed with an effort

and with pain, and all the common symptoms of stricture of the rectum are present.

In this more aggravated form, the complaint will yet often yield to simple treatment;—such as the observance of a regulated diet, the use of gentle aperient medicine, the daily use of the bougie, and of lavements of tepid water. If these milder means are insufficient, the sphincter is to be divided, and the wound, by the introduction of threads of lint, is to be made to heal by granulation from the bottom." 187.

We have not found active cathartics beneficial in spasmodic contraction of the sphincter. On the contrary, they have appeared to us to aggravate the affection. The treatment we have found succeed best was calomel and opium for a night or two, very mild aperients, as the lenitive electuary, the bidet, and, if these means failed to procure relief, the gentle employment of the bougie. We have seen many cases relieved in this manner.

Cancer of the Rectum.

Mr. Mayo observes that there are two forms of scirrhus of the rectum.

In one the thickening is inconsiderable; but the mucous membrane is abraded, the muscular coat is hard, firm, gristly, and the canal of the bowel is narrowed. The muscular fibre of the bowel is partly converted into, partly contained in, firm, gristly, fibrous substance. This commonly begins from an inch to an inch and a half within the anus, and generally occupies from four to five inches of the bowel. Mr. M. has seen it occupy sixteen inches. The change from the healthy to the diseased state is often very gradual towards the anus, but, above, the diseased structure always terminates abruptly, meeting a raised, uneven, ulcerated edge of mucous membrane.

The second or fungoïd variety is characterised by considerable thickening, caused by the presence of a quantity of scirrhous deposit greater than in the preceding instance. The scirrhous matter, grey, fibrous, not perfectly opaque, gristly, as in the first kind, is of a looser and more succulent texture.

"Fungoid scirrhus at its commencement generally occupies a portion only of the circumference of the bowel, and is felt as a hard tumour situated about three inches within the gut and commonly upon its anterior surface, with the mucous membrane as yet unbroken. The growth of the scirrhus is liable to extend in each direction, upwards to the sigmoid flexure of the colon, and downwards so as to implicate the anus and to throw the adjacent integument into firm hard knots. Similar disease sometimes originates in and is confined to the sigmoid flexure of the colon, and is occasionally met with at parts of the great intestine still higher.

In either form of the disease, the fat external to the rectum is liable to assume a firm and crisp texture, resembling the state of the adipose membrane met with around a cancerous mamma." 196.

The patient may die gradually, worn out by suffering, or more quickly from complete obstruction of the bowels. The treatment recommended by Mr. Mayo is of the palliative kind usually adopted. Occasionally, when the canal is very much narrowed, a bougie is serviceable, as is the use of the flexible tube to wash out and unload the bowel above. Sometimes the malignant growth is so considerable, and its sensibility so great, that a bougie cannot be borne. In such cases the channel may be enlarged, if the part

is within reach of the finger, by division of the scirrhus. Mr. M. relates a case of this description.

"Mary Woolgrove, ætat. 32, was recently admitted into the Middlesex Hospital. In the year 1818, she had been cut for fistula, and since that time had never been entirely free from occasional discharges of blood and mucus from the bowel. But it was not till three years and a half ago, that pain and obstruction and other symptoms of carcinoma appeared. At the period of her admission she was greatly extenuated, having suffered for several weeks constant painful purging of liquid matter. The anus was indurated, and surrounded with scirrhous nodules partly in a state of ulceration. Upon an examination of the rectum, the finger was stopped at an inch within the gut by a mass of fungoid scirrhus, through which an urethra-bougie could only be passed. By means of opiates the pain which this patient suffered was mitigated, and the purging checked; I then tried to enlarge the passage by the use of bougies; but the attempt was ineffectual, and violent liquid purging returned. Under these circumstances I determined to divide the scirrhus. For this purpose I introduced the blade of a strong straight probe-pointed bistoury upon the fore-finger of the left hand, and divided the scirrhus towards the sacrum, gaining space enough to allow the finger to be passed further into the bowel. I then divided in the same manner the part beyond. The scirrhus terminated, as I had anticipated, at three inches within the anus, so that the operation was entirely successful. It has given the patient great relief, who now has a free passage through the part, which is besides less sore and painful than before." 207.

Mr. M. has never seen a case of scirrhus unattended with thickening in men. We must say that we are not convinced of this form being really scirrhus. We recollect a very well marked instance of it in a female who died suddenly of inflammation of the pelvic cellular membrane. The mucous membrane was destroyed for some extent, and the other tunics were consolidated, and cut almost like cartilage. But there was ulceration in many parts of the colon, and in successive situations the disease might be traced from simple ulceration to this ulterior complication. This patient had had dysentery. We are tempted to believe that extensive ulceration of the rectum of any sort, if reduced to a chronic condition by neglect, ill-treatment, or any other cause may assume the condition described by Mr. Mayo. It is probably not a curable disease, but, if it is not actually malignant, it may be a remediable one, and unlikely to contaminate other organs.

"When carcinoma of the rectum comes before the practitioner as a hard swelling situated just within the anus, with a mucous surface as yet unbroken, the use of the bougie is not needed for the dilatation of the channel, and would be prejudicial by hastening the ulcerative stage of the disease. But other expedients suggest themselves; and we are led to inquire, whether the disease may not admit of excision, or whether the entire termination of the rectum, including with the diseased part a portion of the adjacent sound bowel, may not be removed." 208.

Mr. Crosse, of Norwich, a very excellent surgeon, as our readers well know, excised a malignant tumour, which grew, like a mushroom, from the left side of the rectum, just within the sphincter. Two months after he left the hospital, this patient returned with great increase of the disease, and he died in five or six months after the operation.

Mr. Mayo inquires whether we may not go farther than this and excise the whole cylinder of the gut, when the disease does not extend very high.

Mr. Mayo has performed this operation on a woman, aged forty. The inner surface of the bowel began to be ulcerated half an inch within the orifice. The ulcer extended round the rectum, and was upwards of an inch in breadth: there was considerable induration. The patient had suffered long and severely, and could not quit the recumbent posture. The patient felt relief after the operation, regained her embonpoint, and neither contraction, nor incontinence of fæces resulted. But a serious evil followed. Prolapsus of the bowel came on; some length of intestine was gradually pushed out in a state of eversion; and the mucous surface, irritated by exposure and pressure, became a new and constant source of uneasiness. Two years after the operation the woman died of peritoneal inflammation. The mucous membrane adjoining the cicatrix had begun anew to ulcerate.

It may be questioned whether the operation was even in this case a benefit. One evil was substituted for another, and the patient died at last, with the disease returning, having undergone the pain and the risk of an operation, and suffered all the feelings of disappointment that an operation uselessly submitted to engenders. When we compare this with the case of Mr. Crosse—when we reflect on the ill success of operations for scirrhus under the most favourable circumstances, for instance, in the testis and mamma—when we consider that a patient is not likely to submit to excision of a portion of the rectum, and indeed that the surgeon is not warranted in proposing it until the disease is unequivocally established—and when we take into the account the unfavourable impression that useless or unsuccessfull operations create, not only against the operator, but against his art—when we look at all these circumstances we must say that we can hardly join Mr. Mayo in his feeling in favour of an operation.

Mr. M. concludes with the narration of a case, and expresses a regret that he did not operate at an earlier period. We have seen a good deal of operations at all periods for malignant disease, and we fear the result would have been the same, had Mr. Mayo's wish been realised.

In this case, when the bowels acted, a peculiar substance came down, in texture not unlike a common polypus of the nose, but it had greater firmness. The disc of the tumour was more vascular than the pedicle, and it bled readily upon being handled. It was quite insensible. Upon examining the rectum, the pedicle of the tumour was found attached to the fore-part of the bowel, behind the prostate gland. There was some little hardness of the rectum at this part. Now this really appears to have been, comparatively speaking, a favourable case. Yet, mark the result. The tumour was removed by a ligature. In three months the patient came back with the fore-part of the rectum occupied by nodular masses, appearing to the touch, of the same substance as the original tumour. Mr. M. included all these in a ligature. The tumour again grew rapidly, and the patient died. The disease was fungoid scirrhus.

The fact of the matter is that a great series of experiments on the extirpation of malignant disease, have been made of late years. Some have selected the jaws, some the malar bone, some the extremities, some the uterus, and some the rectum, for their operations. The issue of the cases is graven on the tomb-stone.

We have now completed our notice of Mr. Mayo's work. In a second edition, which we hope to see soon, we have no doubt the subjects will be

considered more systematically, that several omissions, which we observe will be supplied, and that the wood-cuts, which have rather a ridiculous appearance, will be omitted. We put it to Mr. Mayo's good taste to decide whether any possible advantage can result from giving a sketch of a pin with a needle through it, or from a scratchy representation of what is denominated "a forest of warts." We trust that when Mr. Mayo has seen more of these diseases he will gratify the profession by laying before it the result of his extended experience.

II.

OUTLINES OF PATHOLOGY. By *William Pulteney Alison*, M.D F.R.S.E Fellow of the Royal College of Physicians, and Professor of the Institute of Medicine in the University of Edinburgh.

THAT department of medicine which treats of the classification, causes, symptoms, and signs of disease, has been called pathology. This is a definition which narrows its limits, for every, the slightest deviation from health to disease is included under the word pathology, just as every thing which has reference to the healthy state is the subject of physiology. There is no branch of medicine so full of interest to the physician as pathology. It is, as it were, the arena upon which the other departments of the science—anatomy, physiology, botany, materia medica, chemistry, are brought into action. Its limits, like those of many of the other sciences, are unbounded; each day extends its domain in the hands of the scientific enquirer, without ever being able to grasp the various modifications of disease which the different textures of an organ will put on. We are aware that there are many in the profession, who think that too much attention has been paid to pathology, and that the study of disease has been sacrificed to the mania of hunting after the prismatic hues of morbid textures; this is an objection which could arise only from the limited sense in which the word pathology has been used by this class, having reference, in their opinion, *only* to appearances after death. But, happily for the science and the valetudinarian world, these are opinions peculiar to a very small portion of the profession. The great competition, and the better order of intellect which are now brought to the study of this subject, aided by the valuable works of our indefatigable neighbours, the French, together with our own native talent, render it unnecessary for us to refute the absurd objections which are advanced against the cultivation of this particular branch of medical science.

Pathology has been divided into many classes; but the most important for our consideration is that into general and special. General pathology means an abstract study of disease, whilst special pathology is confined to those diseases which have a peculiar characteristic feature, which distinguishes them from all other diseases. This division has advantages over the other divisions, into internal and external, either of which may be cultivated independently of the other; whilst general and special pathology are so intimately connected, that the study of the one necessarily involves the study of the other.

Objections may be urged against this division into general and special, we are well aware, as tending to prolong the study of disease. Perhaps, to the practitioner, special pathology is more useful, which affords him a clear knowledge of particular diseases, but, as we have already observed, this cannot exist without implying general pathology. There are certain forms which all diseases have in common; but in particular diseases there are certain distinguishing traits, which are the immediate object of special pathology. General pathology, too, has its disadvantages, for it takes but an abstract view of disease, and from abstraction to error there is but a step.

The first thing for consideration in the study of disease, is a definition, next an exposition of symptoms and causes, then the diagnosis and prognosis, and, lastly, the mode of cure. There is another very important point to observe in the study of general pathology—to pursue that course which is conformable to the study of particular diseases; the mind thus acquires a certain order, by which it arranges its thoughts and classes its several degrees of knowledge.

The abundant supply of standard works on pathology which is daily issuing from the press, both in this country and the Continent, has, at least, removed the charge of neglect with which the profession treated this subject, and affords a reasonable hope of advancing this particular branch to a degree of certainty, which the older writers despaired of attaining. To the work before us, which professes to be merely "Outlines of Pathology," perhaps we should be disposed to pay less attention than it merits, were it not that the recollection of Dr. Alison's lectures left upon our mind an impression, that if he ever came before the public as an author, he would be well received. In this opinion we are not singular.

The objects which he has in view in this book are—"first to state the facts which appear to be ascertained, and the inferences which appear to be fairly deducible from them, in regard to the functions of the living human body in health and disease; and, secondly, to arrange these facts as systematically as possible, in the order in which the functions, as existing in the living body in the adult state, are dependent on one another."

As all the other sciences advance, we should expect that medicine, too, should move forward, if not pari passu, at least not longo intervallo; its steps are indeed few and far between, a circumstance which may be ascribed to the indifference shewn to fixed principles, and their importance in founding a rational system of medicine. Some will assert that medicine is incapable of ever attaining a systematic form, so long as there shall remain any facts unexplained. Though we shall readily admit that there are many facts inexplicable in the present state of the science, yet, as the author justly observes—"if we can follow an order of ascertained dependance of functions

on one another, we are entitled to treat the subject systematically or synthetically."

In the prosecution of medicine as a science, there is one great object to be kept in view—the laws which regulate the movements of the living machine must be contra-distinguished from those of art, and are referable alone to vitality. Cullen adopted this view to a certain extent, but erred, in ascribing to the influence derived from the brain and nervous system the vital power of muscular parts. When Hunter's doctrine of the vitality of the blood becomes extended to other fluids of the body, the simplification of disease will be much advanced, which, as our author observes, shall be found to originate in the capillaries, and which, by shewing the intimate connexion between the solids and fluids which constantly are going on in the capillary system, will ultimately annihilate the distinctions of solidists and humoralists.

In his preliminary observations, he says the first step at generalization, which can only be done by induction—

"Is the classification of individual cases of disease into genera and orders, according to the resemblance which their symptoms, observed during life, bear to each other. Those cases which appear the most closely analogous are carefully observed, and their usual history and terminations ascertained, a selection is made from their histories of the symptoms which appear the most characteristic, and are observed the most uniformly to form the definitions (abridged descriptions) of genera of diseases; and from a number of such definitions, a farther selection is made of certain sets of symptoms, which are stated as characterizing a class or order of genera."

Having once settled in our minds clear views of the physiology of all the organs in the living body, and the separate and combined functions of these organs in health, we can account for many of the phenomena of disease, when its history and symptoms are universally admitted; but that this will be limited to a very small number of diseases, appears from what our author adduces.

1st. "The variety of individual cases of disease being, in fact, infinite, and the rules by which they are classed into genera and orders being, for the most part, arbitrary and artificial, it very often happens, that a case which in some of its symptoms, resembles one set of other cases, (and is, therefore, necessarily classed along with them under the same titles) in others of its symptoms bears an equally important resemblance to others, in different parts of the nosology.

There are, therefore, many combinations and successions of symptoms which it is important to study (both for theoretical and practical purposes), besides those on which the arrangements of classes and genera are founded; such are those which we express by the terms tendency to syncope, to coma, or to asphyxia, typhoid tendency, inflammatory tendency, nervous irritability, gastric derangement, putrescent diathesis, &c. which are often observed in the course of many different diseases. When we attempt the explanation of deviation from the healthy state of the body, these morbid states, often common to many cases which are otherwise very dissimilar, claim attention equally as the histories of diseases distinguished by the nosologist, and it becomes obvious that the science of pathology cannot be limited by these arbitrary distinctions.

2dly. When changes in the structure of the body that take place in the course of disease, are examined during life, and more especially after death, it appears that different combinations of symptoms are often apparently excited by the same fundamental diseased action, and consequently found in connexion with the same

alteration of organic structure; and again, that very different alterations of structure may be attended in different individuals by symptoms, the greater number of which are very nearly the same."

The great attention which has been bestowed upon morbid anatomy, has led many to consider it as the only source of pathological information, in fact, that pathology and morbid anatomy are synonymous terms. To this opinion they are the more inclined, from the little variety the organic structures exhibit after death, and the precise arrangement which they will admit of. But our author clearly proves that this, though an essential part, constitutes but a small portion of a system of pathology.

1st. "There are very numerous cases, arranged into different genera of disease; some of them important, and even rapidly fatal—*e. g.* different forms of fever, certain cases of apoplexy and syncope, tetanus, &c. &c. which do not uniformly nor necessarily leave behind them, so far as is yet known, any alteration of textures, or other change, perceptible to the anatomist, the pathology of which diseases, therefore, although it may derive assistance from, cannot possibly be founded on the knowledge of morbid appearances.

2dly. In many cases of disease, when decided alterations of structure are found after death, these cannot be connected with the fatal event, and do not furnish a rational explanation of it, without reference to general facts or principles, known to us simply by the previous observation of disease, and by generalization of facts which that study presents. It is only by such observation that we learn, that a certain amount of inflammation over the peritoneum furnishes an adequate explanation of fatal depression of the heart's action; or even, that a certain extent of ulceration of the lungs is sufficient to explain a wasting hectic fever. In such cases it is obvious that the laws, according to which such lesions become injurious or fatal, as they cannot be deduced from the study of the lesions themselves, demand a separate investigation."

In our pathological investigations, our object is, not merely to discover this or that particular hue, which the diseased textures of an organ will exhibit after death, and which will often go far in explaining many of the symptoms which preceded death; but if possible to ascertain the conditions and nature of the diseased action which preceded the structural derangement. Cultivated in this sense only, can we ever expect that pathology will aid us in the treatment of disease.

Our author lays down three general rules which are necessary to the advancement of pathology to a fixed science.

1st. "To have reference to the laws of those morbid actions which produce no lesions of structure.

2nd. Those which precede, and cause such lesions.

3rd. Those which are produced by, and succeed such lesions, or attend their formation."

The author next enters at considerable length into the causes of sudden death, ascribing the fatal effects, either to the "directly depressing or suspending the vital action of the organs of circulation, or else by their obstructing the arterialization of the blood."

The influence which the brain and nervous system exercise over the functions of life, is clearly proved by the fatal effects attending injuries of that system. Thus, syncope or death beginning at the heart, will ensue on a violent shock to the system, which disturbs the nervous powers; coma, or death commencing at the brain, by suspension of sensibility and asphyxia,

or death beginning at the lungs, by interrupting the access of air to the blood, for its due arterialization. The experiments of Wilson Philip, and Le Gallois, have shewn that severe injuries to the brain and nervous system will paralyse the actions of the heart and capillaries, and that fatal results unmarked by any appreciable change of structure, will often succeed to severe shocks of the system at large. Thus we see that, though not necessarily essential to the functions of organic life, any violent injury done to the nervous system will certainly disturb or entirely suspend the functions of these organs, but these effects will vary much, according to the constitution of individuals. The author states, from experiments by Chossat, "That the heart's action was for some little time affected by certain injuries of the brain, which checked the circulation in the capillaries so completely as to suspend the secretion and evolution of heat, when the spinal cord, below the neck, in the human body, was severely injured, the circulation of the capillaries has generally appeared for some time, more affected than the heart's action, although it is by gradual failure of circulation that such cases are ultimately fatal."

The author adduces many instances illustrative of these views, but which it is unnecessary here to dwell on more fully; one in particular we shall allude to. A lacerated wound of the abdomen, where, without extensive hæmorrhage, and previous to the appearance of inflammation the patient expires; death in this instance is ascribed by Dupuytren to the exhaustion of sensibility. He next proceeds to notice the effect of heat, lightning, cold, and the action of poisons on the system at large.

"In those," he says, "who become comatose from cold, the heart's action is at the same time enfeebled; and it appears distinctly, from experiments on animals, and observations on the human body, that the most intense cold may be fatal in the same way as a concussion by a direct depressing effect on the circulation; in which case, of course, respiration continues up to the moment when the heart's action ceases; the heart is found motionless, and with arterial blood in its left cavites immediately after death, and the artificial respiration is quite ineffectual in prolonging life.

In all such cases, cold acts as a sedative power on the capillary circulation on the surface, and Dr. Edwards found that its repeated or long-continued application has a peculiar effect in depressing the power of subsequently generating heat. In some instances of frost-bite, the effect is so powerful on the parts to which it is chiefly applied, as to put a final stop to all vital action in them, even where the system at large does not materially suffer; and in many cases, the sedative effect on the vital actions of frost-bitten parts is such, that the inflammation (which is always excited in a greater or less degree by the return of heat to such limbs) shews evident marks of deficient reaction, and tends rapidly to gangrene.

But such effects of intense cold on the vital actions of *individual parts* must be carefully distinguished from the case of cold acting as a powerful sedative on the *whole system*; because in the first of these cases, when the general circulation is strong the chief danger is from the inflammation which is the direct consequence of the restoration of the circulation and natural heat of the parts; and this is chiefly to be moderated by causing that restoration to take place very gradually, therefore chiefly by cold applications tending to retard it; whereas, when the vital power of the whole system has been depressed, there is no such risk of local injury from the restoration of temperature, and external heat and other stimuli may be much more fully applied."

The action of cold on the living system may be viewed under different heads. The first effect arising from its application is that of sensation, which will always be in proportion to the existing state of the sensibility, producing upon the nervous system a shock, according as the impression is quick or slow. Another effect of its application is, the abstraction of heat, which when heat abounds in the animal economy will have a beneficial effect in restoring an equilibrium of temperature, but which must have an injurious effect when the caloric does not rise above the natural standard. It acts on the living fibre as a stimulus, in the ratio of its dryness, and the shortness of its application. Its influence is not confined to the parts to which it is directly applied, but extends to every part of the system, exciting without augmenting the irritability and organic contractility. A few drops of water sprinkled over the face are sufficient to rouse the hysteric patient to a sense of consciousness, and notwithstanding the injurious effects of cold when applied in a low degree of temperature to the living body, we find that its application at 32° Fah. is sufficient to rouse to life hybernating animals.

Another effect of the application of cold is constriction, but which, if long continued, has a contrary effect. Spasm is another result depending upon the disagreeable impression made on the nerves by cold. Such is the effect of its sudden application in some individuals, that Tissot relates a case where a large portion of the intestine was forced out at the anus by spasmodic action. Zimmerman, Hoffman, Pinel, adduce many cases in support of this view. Pinel states that vomiting occurred to a woman immediately on her putting her feet into cold water. Alexander, when he plunged into the river Cydnus, affords us another proof of the spasmodic constriction arising from cold. Upon the reaction which succeeds in vigorous constitutions to the moderate application of cold, we shall not allude, but pass to its benumbing effects, which is the result of severe cold long continued. In this way certain animals have been lulled to sleep, by being kept for some time under the influence of a very low temperature. The blood which leaves the capillaries in this particular state of the system, is driven in greater quantity upon the three great cavities; which, by distending their several vessels oppresses them, disturbs the equilibrium of circulation between the internal and external parts, and excites plethoric engorgements, and many vascular and nervous phenomena, which sometimes terminate fatally. In this way many lunatics have perished, who under the old system of treatment were kept long immersed in cold water, which, by detaining the blood in the head was commonly fatal. The circulation in the lungs and nervous system is so much embarrassed by its influence, that sleep, too often the sleep of death, ensues, whilst, like opium, it destroys all sensibility and contractility. Even the heart under its influence is incapable of further action, having lost all irritability. Prosper Alpinus states, that cold in its results is similar to narcotics. Though this is the general result of cold long applied, there is in Boerhaave's Commentaries, a case of a man who died of cold, whose brain upon dissection shewed evident traces of inflammation in the right hemisphere which was adhering to the dura mater by false membrane. But the physical man is not the only part which suffers from the prolonged application of cold. The intellect, the imagination, the sensitive faculty, become more concentrated, and as it has been said, the soul acts more on herself. To sum up the or-

dinary impressions of cold,—the circulation becomes languid, the blood passes through the lungs in smaller quantity, less is oxygenated, the pulsations of the heart are in accordance with the small quantity of blood which reaches it, the body grows cold, the blood coagulates, and on dissection, we find it collected in the sinus of the dura mater, the heart, and large vessels.

With respect to the various ways in which poisons exert their fatal influence upon the system, he enters at considerable length. He doubts the conclusions at which many have arrived with respect to their modus operandi—namely, that the sole direct action of poisons is on the nerves of the vessels, and their action on the brain and heart is only sympathetic. He is inclined to the belief, that the effect of those which have been absorbed into the blood, is consequent on their direct application to the more important vital organs. However, he admits that poisons exert some power through the medium of the brain and nerves, more especially when they have been absorbed into the circulation. He rejects altogether the idea of classing poisons according to the mode in which death ensues, which will in general vary with the dose. Oxalic acid acts upon the nervous system, when exhibited in small doses, whilst in large doses, it suspends directly the action of the heart. Arsenic, when taken in large doses, occasions death by its effects upon the heart, before any inflammation ensues, which is the point to be dreaded, when it is exhibited in small doses.

He next proceeds to notice the effects of dangerous hæmorrhage upon the living body, and offers some judicious remarks upon the rapid sinking of the heart's action in violent hæmorrhage. The appearances which the mucous membranes present after death by fasting are ascribed by him to a deficiency of natural intestinal mucus. Upon this point we are not quite satisfied with our author's reasoning, particularly when we consider the different degrees of febrile action which may be excited by the act of fasting, negative as it may appear; neither does it appear to us that he has clearly distinguished cause from effect. If the mucus of the intestines be intended to protect them from the contact of foreign bodies, when taken in under the form of food, when they cease to be taken, the necessity, we should suppose, would no longer exist. But it will be urged, that even still there is a secretion of excrementitious matter, and that then mucus is required; that this may be the case we cannot deny, but we can hardly suppose that Nature, who provides so well in other respects for our existence, should have neglected a provision of this kind. Still, though not satisfied with our author's explanation, we candidly confess that we cannot offer any altogether unobjectionable.

We now come to the consideration of the remote causes of disease. Under this he "includes not only causes acting externally to the body, but also circumstances in the condition of the body itself, previous to the attack of disease in question, which are believed to assist in exciting it." These causes are generally divided into predisponent and exciting. The predisponent are nothing but the tendency which some people have to take on this or that particular form of disease, the exciting is that which calls this disposition into action. Though the same exciting cause will not always produce the same disease, yet the frequency of its occurrence is sufficient to establish it as a general rule.

There is one particular cause, to which the author refers as a fruitful source of disease, and which has often escaped the notice of those who seek in morbid anatomy the cause of all disease, and which, as generally abounding in structural lesions, has been set down as the true cause of disease. Referring to the doctrine of Parry, he observes that the most efficient cause of all diseases is local or general plethora. To follow him through the various causes upon which plethora, general or local, may depend, would, in fact, be but a rescript of the book, to which we would gladly direct the attention of our junior brethren. Neither shall we dwell on the views which he offers, of the operation of contagious and malarious diseases, which, though presenting little that has not been already known, still is deserving attentive perusal. Alluding to the laws which regulate their operation, he says—

"The well-ascertained fact, that the morbific effect of these poisons is remarkably increased by debility and inanition, and diminished by fulness and excitement of the vascular system, gives good reason to believe that their action is consequent on their absorption into the blood; because it appears, that by these circumstances absorption is remarkably increased or diminished."

He next proceeds to consider the deranged action of the heart, which he ranks under the three heads of deficient action, inordinate or irregular action, and painful action. To point out here the common symptoms which attend its deficient action, when syncope ensues, is, we apprehend, unnecessary, being such as all medical men are acquainted with. But there are particular changes which occur in the nervous system not so well understood, and which appear to be chiefly influenced by the condition of the vascular system. This state depends, he says, upon the suddenness with which the depression in the heart's action is effected.

"When it takes place *slowly*, the impulse of the blood on the brain and nerves being very gradually diminished, the nervous system suffers in the first instance very little, and the pulse may become imperceptible, and the skin quite cold, before the senses are obscured, or the intellect sensibly impaired. The senses of sight and hearing are generally the first that are blunted in such cases; but the mind is clear, voluntary motions, though enfeebled, may often be performed with precision;—and the sensation which prompts to acts of respiration is so entire, that a heavy and laborious breathing is gradually produced, evidently depending, not on any impediment to the access of air to the lungs, but simply on the increasing difficulty with which the enfeebled heart propels the blood through the lungs. This is the state of the symptoms in many cases of disease when there is imminent danger of death by syncope. In such cases, the pulsations of the heart become usually more frequent as they become feebler.

But when the heart's action is *rapidly* depressed, as by hæmorrhage, or violent mental emotion, the sudden diminution of the pressure on the brain and nerves, like other sudden changes in the condition of these parts, powerfully affects the functions of the nervous system; and there is vertigo, tinnitus aurium, and the other symptoms attending syncope. In such cases the diminution of sensation is often such that the act of respiration, as well as all perceptible action of the heart, may be nearly or certainly suspended for a time, without any bad consequence.

We therefore see fits of syncope, or a tendency to it, brought on either by loss of blood, or purging, or sweating, or by alteration in the distribution of the blood, as by drawing off the fluid in ascites, we may reasonably infer, that the immediate cause of complete failure of the heart's action is not the mere dimi-

nution of the stimulus acting on the heart, but a change in the condition of the nervous system; just as it certainly is when syncope is produced by strong mental emotions, by certain long-continued and unpleasant sensation, such as particular odours, or by intense pain, or the sudden transition from pain to ease, which are likewise frequent exciting causes of this affection."

However intimate this relation, it does not necessarily imply a dependence of the heart's action on nervous influence, though many of the older writers argued strongly in favour of it. That the brain and nervous system extend their influence to the heart is admitted, but not to the extent of regulating its healthy functional movements. Any violent impressions made upon this system will, through its ganglionic connexions, reach the heart, disturbing rather than regulating its movements. In all cases of inordinate action, where organic disease does not exist, or where the muscular substance of the heart is not increased, the indications of cure are, to invigorate the vascular system, in which the nervous generally shares. It is well known that, as the heart becomes weaker, it is more easily excited to contractions, and its functions are sooner disturbed. Under this painful action of the heart, angina is ranked, which, he says, depends immediately on impressions made on the sensitive nerves of the heart. Though not necessarily implying organic disease of the heart, it rarely occurs where such derangement does not exist. But the mode of cure would lead us to suppose that it depended much upon plethora, as we find it always much relieved by local or general bleeding. In irritable weak constitutions, palpitations will often occur, upon a transition from exercise to repose; by which means a larger supply of blood is thrown upon the heart, when the capillary circulation is checked. It is needless to say, that where any mechanical opposition to the heart's action exists, it will be more easily disturbed; when ossification of any of the valves occur, syncope will more frequently happen, which in this condition is pregnant with danger. By means of the stethoscope we can easily ascertain, at a very early period, when disease of this kind exists. In the first place, the heart becomes enlarged, in which the aorta often participates. The state of hypertrophy is proved by the increased impulse which it communicates to the parietes of the thorax. We detect an alteration in the sounds of the heart's action, occasioned by the resistance offered to the current of blood, and the strong efforts of the heart to overcome it.

Our author next enters at considerable length on local determinations and congestions of blood, and their immediate effects.

"They often lead to, or are combined with, not only great increase of exhalations, or of secretions, but likewise with increase of nutrition of healthy textures, or with such provisions of nutrition as constitute morbid or adventitious structures, and we shall find that they often pass into true inflammation, acute or chronic; but without altering the chemical phenomena, or the products from the blood in any part of the body, they may be injurious, or even dangerous in two ways, *first* by disturbance of the functions of the parts when they take place, independently of any lesion of their structure, and consequent derangement of functions of parts, as result from the simple effusion of blood into them."

The doctrine of congestion is not a new one, and though our author has laboured much to shew its effects on the different organs and textures, shewing that there is scarcely a disease to which we are liable, which is not more or less connected with congestion, or at least increased afflux of blood

particular texture, yet he has added little to what Parry has left us
ubject. Congestion or afflux of blood to any texture or organ does
ssarily imply disease. We know that a larger quantity of blood
inarily will often circulate through various textures, and even stag-
a time in them, without producing disease, such is the distensi-
some textures. It is evident that perfect healthy action is com-
rith this congestion; nay, it is a part of the provision of Nature to
these temporary stagnations of blood, some for nutrition, some
itions, and others for emotions. To these congestions the mucous
ie, the parenchymatous viscera, the lungs, the liver, spleen, kidneys,
very liable; and even in the brain, notwithstanding what has been
the contrary, congestions of blood will sometimes occur and prove
hese congestions will of course vary with the age of the individual;
we find the capillary system fullest; in advanced life, when the
f the body is established, the current of blood is directed from the
system to internal organs, where congestion will take place when
any impediment to the free arterialization of the blood; or in the
al viscera, when the flow of venous blood is disturbed either in the
in the lungs or heart. "Such congestions and effusions are of course
to take place in cases where the blood is in full quantity, and has
lency to coagulation than usual, and therefore such fallacious ap-
s are seen most frequently after different kinds of violent death, or
ntagious febrile diseases of short duration. But when the same
nces are found in parts of the body where gravitation would not
e them, when they are found under the circumstances stated above,
ring local congestions of blood, and when they correspond to symp-
erved during life, of embarrassment of functions of the parts where
formed, there can be no difficulty about regarding them as the
nd indications of morbid determinations of blood."

this brief notice of the important subjects which we have now
over, we close our observations for the present number, reserving
ext the subjects of inflammation, idiopathic fever, diseased states of
, diseased states of the nervous system and blood. The style of the
though not decidedly objectionable, still is evidently laboured, and
places not very intelligible, from the confusion of parenthesis, a
which cannot be too strongly condemned. We do not hesitate to
at were the author as conversant with writing as he is with every
ent of medical science, the book would be, like his oral lectures,
telligible, and precise.

III.

THE INFIRMITIES OF GENIUS ILLUSTRATED BY REFERRING THE ANOMALIES IN THE LITERARY CHARACTER TO THE HABITS AND CONSTITUTIONAL PECULIARITIES OF MEN OF GENIUS. By *R. R. Madden*, Esq. Author of "Travels in Turkey," &c. 2 vols. 12mo. Saunders and Otley, 1833.

PROVIDENCE has not left the good and the bad things of this world so much to chance, as some philosophers imagine. The balance of happiness and misery—of enjoyment and suffering—is adjusted by a hand unseen, and we very much doubt whether, all things considered, the scale ever turns very far from the equilibrium. We see and we envy the gifts of fortune and the possession of splendid talents; but the dark side of the picture is generally concealed from our view, and our estimates of prosperity and adversity are often most erroneous.

The Author of the work before us is well known to the public, and to our readers, by his travels in the East, of which we gave an ample account in this journal. As a medical man and a traveller, he has had opportunities of studying human nature on a wide scale, and in the present instance, he has turned his talents and acquirements into a channel where their force and utility will have every chance of success. The subject is far from being uninteresting to the medical practitioner. It is his duty and his interest, to study MAN in health, as well as in sickness—and to watch the workings of mind as well as of matter, in the human microcosm. Physicians (by which we mean medical men of all descriptions) have lost much in public estimation, by directing their attention too exclusively to disorders of the corporeal fabric, and by thinking it an extra-professional labour, to study the moral part of our nature. The physician, in fact, has infinitely greater, better, and more numerous opportunities of acquiring an intimate knowledge of metaphysics than the divine or the moral philosopher; and, whenever he has directed his attention to these subjects, he has excelled in them. The immortal Locke is a sufficient example.

With the last-mentioned physician and metaphysician, we disbelieve the doctrine of innate ideas, and conceive that all those peculiarities or excentricities of individuals, which are commonly attributed to mind, are in reality, connected with, or rather dependent on, certain peculiarities of bodily organization. But it will be said, "we see genius, talent, &c. hereditary in families." Well. This, to our minds, is a proof that talent and genius depend on organization. It would be a dangerous doctrine to maintain, that the *soul* is transmitted from parent to progeny! If a "*divinæ particula auræ*" be not conferred on every individual at the moment of his first creation, adieu to all hope of the immortality of the soul! When we observe genius or talent, then, transmitted hereditarily, we believe that it is the *capacity* in our corporeal organization for the future exercise of the soul, that is born with us. This doctrine, so far from tending to materialism, is, in fact, the grand bulwark against that doctrine. He who believes that the soul is transmitted from father to son, with peculiarities, like the colour of the hair or the form of the nose, is a downright materialist, and degrades the destinies of man.

But descending from this argument to a subject somewhat lower; we think it will hardly be disputed, that much of men's tempers, peculiarities, and even their disorders, depend on their avocations and pursuits. Among the lower classes—artizans, mechanics, &c. this fact is notorious; and there is no reason to think that science and literature are exempt from the same effects.

In respect to literary men, it is generally admitted, that they are an "irritable race," subject to many infirmities of mind and body, eccentricity being the "badge of all their tribe."

"The studious man sets out with stealing an hour or two from his ordinary repose; sometimes perhaps more; and finishes by devoting whole nights to his pursuits. But this night-work leads to exhaustion, and the universal sense of sinking in every organ that accompanies it, suggests the use of stimulants, most probably of wine; alcohol, however, in some shape or other. And what is the result?—why, the existence that is passed in a constant circle of excitement and exhaustion, is shortened, or rendered miserable by such alternations; and the victim becomes accessary to his own sufferings." 17.

These are extreme cases, but not exceedingly unusual. In a majority of instances, the man of literature or science consumes his strength and spirits in his study, without taking sufficient exercise in the open air—the consequence of which is, dyspepsia, with all its proteian horrors, and determination to the brain, the only organ in the body which is over-worked.

In the second chapter, Mr. Madden discusses the use and the abuse of literary habits and literary temperaments. The advantages of literature dissipating the evils of ennui, are humorously characterised in the following satirical sketch.

"It surely is not the least advantage of literary employment that it enables us to live in a state of blissful ignorance of our next-door neighbour's fortune, faith, and politics; that it produces a state of society which admits of no invasion on domestic privacy, and furnishes us with arms against *ennui*, which supersede the necessity of a standing army of elderly female moralists, and domestic politicians. In large cities, at least, literature occupies the ground which politics and scandal keep possession of in small ones; in the time of Tacitus the evil was common to the communities of both:

'Vitium parvis magnisque civitatibus commune
Ignorantium et invidiam.'

Leisure, it seems, had no better occupation ere 'the art of multiplying manuscripts through the intervention of machinery' was discovered; but in these days of book-publishing celebrity, when the Press pours volumes on the town with the velocity of Perkins' steam-gun, one has hardly sufficient leisure to acquire a knowledge even of the names of those 'dread counterfeits' of dead men's thoughts, which living plagiarism is continually recasting and sending forth." 24.

But we must pass over several chapters, in order to notice the sixth—The Influence of Studious Habits on the Duration of Life. It is remarked by D'Israeli that, "every class of genius has distinct habits—all poets resemble one another, as all painters, and all mathematicians. There is a conformity in the casts of their minds, and the quality of each is distinct from the other."

"For the purpose," says Mr. M., "of ascertaining the influence of different studies on the longevity of authors, the tables which follow have been con-

structed, in which the names and ages of the most celebrated authors in various departments of literature and science are set down, each list contai twenty names of those individuals who have devoted their lives to a parti pursuit, and excelled in it. No other attention has been given to the sele than that which eminence suggested, without any regard to the ages of t who presented themselves to notice." 71.

A little reflexion will convince us that these tables are liable to g error; for we never can get a true estimate of longevity, without ha the whole number in a class, instead of a few of the most eminent. T suppose we were to take 20 of the most distinguished English physician surgeons, on the rolls of fame, and divide the aggregate of their ages by It would certainly give us the average longevity of our most distingui men in the two departments, but it would present no criterion for the ration of life, in physicians and surgeons generally—though hundre them might have been as studious and skilful as any of those selected in list of twenty, but who were not fortunate enough to have their na transmitted to posterity in print. Still, the tables here collected by Madden are curious, and the resumée we shall present to our readers.

	Aggregate years.	*Average years.*
Natural Philosophers	1504	75
Moral Philosophers	1417	70
Sculptors and Painters	1412	70
Authors on Law and Jurisprudence	1394	69
Medical Authors	1368	68
Authors on Revealed Religion	1350	67
Philologists	1323	66
Musical Composers	1284	64
Novelists and Miscellaneous Authors	1257	62½
Dramatists	1249	62
Authors on Natural Religion	1245	62
Poets	1144	57

From these tables it would appear, that those pursuits in which the i gination is strongly exerted, are unfavourable to longevity. The nat philosophers, for instance, out-lived the poets by 18 years on an aver Is natural philosophy a less laborious study than poetry? Or is it that latter is rather a passion than a pursuit, communicating an excitemer all our feelings and faculties that wears down the vital powers much so than the most profound reflection on subjects of a different character?

Mr. Madden has several chapters on the different classes above-me oned, which will richly repay perusal. The 13th chapter is on the last ments of men of genius.

"Generally speaking, the influence of literature and science over the mind the demeanor of men, is at no period displayed to such advantage as at th the close of life. What medical man has attended at the death-bed of the s lar, or the studious man, and has not found death divested of half its terror the dignified composure of the sufferer, and his state one of peace and sere compared with the abject condition of the unenlightened mind in the same tremity? Those, perhaps, who relinquish life with the most reluctance, p doxical as it may appear to be, are to be found in the most opposite grade society—those in the very highest and lowest walks of life." 138.

The fact is, that it is in health, and in diseases not necessarily fatal,

people are most apprehensive of death. When the last scene arrives very few are aware of their danger. Their friends and themselves entertain hope till insensibility takes place, and then the departing spirit knows nothing of the event that is impending.

"In different countries, likewise, it is singular in what different degrees people are influenced by the fear of eternity, and in what different ways the pomp of death, the peculiar mode of sepulture, reasonable views of religion, and terrifying superstitions affect the people of particular countries. The Irish, who are certainly not deficient in physical courage, support bodily suffering, and encounter death, with less fortitude than the people of this country. A German entertains his fate, in his dying moments, more like a philosopher than a Frenchman. And, of all places in the world, the capital of Turkey is it, where we have seen death present the greatest terrors, and where life has been most unwillingly resigned. The Arabs, on the other hand, professing the same religion as the Turks, differ from them wholly in this respect, and meet death with greater indifference than the humbler classes of any other country, Mahomedan or Christian. It is truly surprising with what apathy an Arab, in extremity, will lay him down to die, and with what pertinacity the Turk will cling to life—with what abject importunity he will solicit the physician to save and preserve him." 140.

In the expedition of Ibrahim Pasha to the Morea, when Mr. Madden accompanied him, and where he had opportunities of seeing hundreds dying daily in the camps, the haughty Moslem went to the society of his celestial Houries, like a miserable slave, while the good humoured Arab went like a hero to his long last home.

Mr. Madden, towards the middle of the first volume, illustrates his observations on the character of poets, by examining minutely into the temperaments and other physical conditions of some of the more eminent individuals of that race.

Pope stands the first on the list; and our author very successfully explains the peevishness of temper and way-wardness of humour, evinced by the immortal Bard of Twickenham, by his bodily infirmities. Johnson remarks that, "by natural deformity, or accidental distortion, the vital functions of Pope were so much disordered, that his life was a long disease." The deformity resulted from an affection of the spine, contracted in infancy, and, no doubt, occasioning the extreme delicacy of his constitution. The disorder of his digestive organs, too, had a great and preponderating influence on his temper, as every practical physician knows. Pope is represented by his biographer, as irascible, capricious, peevish, and resentful —all which manifestations of the temper spring from corporeal disorder, and especially disorder of the digestive organs.

"Johnson has pictured Pope as he really appeared to the world; but Bolingbroke spoke of him when he was on his death-bed, not as he appeared to be, but as he knew him to have been, when he said to his weeping attendants,—'I have known him these thirty years; he was the kindest-hearted man in the world.' Who knows under what paroxysm of mental irritation of that disease which, more than any other, domineers over the feelings of the sufferer, he might have written those bitter sarcasms which he levelled against his literary opponents? Who knows in what moment of bodily pain his irascibility might have taken the form of unjustifiable satire, or his morbid sensibility assumed the sickly shape of petulance and peevishness? Who knows how the strength of the strong mind might have been cast down by his sufferings, when 'he des-

cended to the artifice' of imposing on a bookseller, and of 'writing those letters for effect which he published by subterfuge?' Who, that has observed how the vacillating conduct of the dyspeptic invalid imitates the vagaries of this proteiform malady, can wonder at his capriciousness, or be surprised at the anomaly of bitterness on the tongue, and benevolence in the heart, of the same individual." 186.

Allusion is made to Byron, who spared neither friends nor foes when his angry mood was on him. Mr. M. justly observes, that there was far more malignity in the publication of those lines on Rogers, than in the original penning of them. They were probably written under the influence of bodily disorder, but they were published in cold and calculating blood.

The character of SAMUEL JOHNSON is admirably descanted on in a physiological and pathological point of view. We can only make room for one short extract.

"Johnson's disorder (if we may be allowed the expression) had three phases, the character of each of which distinguished a particular period of his career, or rather predominated at a particular period, for it cannot be said that the hues of each were not occasionally blended. At twenty, however, his despondency was of a religious kind: about forty-five 'his melancholy was at its meridian,' and then had the shape of a fierce irritability, venting itself in irascibility of temper, and fits of capricious arrogance.

At the full period of 'three-score years and ten,' the leading symptom of his hypochondria was, 'the apprehension of death, and every day appeared to aggravate his terrors of the grave.' This was 'the black dog' that worried him to the last moment. Metastasio, we are told, never permitted the word death to be pronounced in his presence; and Johnson was so agitated by having the subject spoken of in his hearing, that on one occasion he insulted Boswell for introducing the topic; and in the words of the latter, he had put 'his head into the lion's mouth a great many times with comparative safety, but at last had it bitten off.'" 231.

For many years before his death the prospect of dissolution was most terrible to this great-minded man. He acknowledged to Boswell that he never had a moment in which the idea of death was not terrible to him. In the intervals of conversation he was often heard to repeat the following line from Shakespeare—

"To die, and go we know not where."

It is not a little curious, that, to the sceptical mind, death is nearly as dreadful as to the superstitious. The idea of annihilation is little less abhorrent to human nature than that of damnation. Johnson shewed the ruling passion, or rather fear, till the final moment. On the last day of his existence, he declared that he would give one of his legs for another year's life! We do not quite agree with our author in the following sentiment.

"If Johnson's fear of death were not the effect of disease, it would be impossible to contemplate his conduct either in sickness or in sorrow, in his closet or on his death-bed, without feelings of absolute disgust. What other sentiment could be entertained—

"For him who crawls enamoured of decay,
Clings to his couch, and sickens years away." 235.

People of the strongest intellect, and of the most religious and moral character, may entertain ideas respecting death and another state of existence, that may embitter life, and yet without any disease to account for

the phenomenon. Education has great influence on our feelings respecting dissolution—nay, even the history of horrid tales, as of resuscitations in the grave, have, to our knowledge, rendered many people wretched, whose healths were not affected. We have no doubt that Johnson laboured under hypochondriasis, and that his abhorrence of death was heightened by this unhappy condition of the constitution; but we believe that the above-mentioned dread was connected with some moral feeling, tenet, or superstition, quite independent of corporeal malady. His belief in ghosts cannot be fairly attributed to hypochondriasis, when we find it as firmly implanted in the minds of the rudest shepherds of the Grampian mountains, where hypochondria never shewed its face. We are more inclined to agree with Boswell, that many of Johnson's superstitions and weaknesses were the weaknesses of a pious and good man, and were "the result of early religious impressions instilled into his mind by his mother, with assiduity, not with judgment." Sunday, he said, was a heavy day for him. When a boy, he was confined on that day, to the perusal of "THE WHOLE DUTY OF MAN," from a great part of which he could derive no instruction.

Mr. Madden appears to think, that Johnson's death was hastened by injudicious bleeding for a spasmodic asthma. It has escaped him that, in a former number of this Journal, we alluded to the *post-mortem* examination of the great lexicographer, which, we believe, was never published, but which we know through the gentleman who opened his body—a gentleman now living in London. His lungs exhibited a very singular appearance—some of the air-cells being as large as a hen's egg, and the whole of the lungs being studded with uncountable numbers of these dilatations, varying in size from a hen's egg to a mustard seed. We lately met with a similar instance—and it was during the examination of the body that Mr. Thomas, of Leicester Place, related the above-mentioned circumstance of Johnson, whose body he had dissected.

BURNS, whose works were once fashionable among all ranks of society, has lately declined in popularity among the aristocracy. Lord Byron, before he took to drink so largely of gin, could not bear to think of the ungentlemanly habits of poor Burns, who solaced his toils and disappointments with a glass of whiskey and a pipe of tobacco. In the eyes of the proud Lord, therefore, the Bard of the North was "a strange compound of dirt and Deity." In fashionable morality it is one thing to get drunk with claret or champagne, and quite another to addle the brain with porter or brandy. The one is merely a little excess in the "pleasures of the table"—the other is "disgusting intoxication." There is no doubt that wine-bibbing is less injurious and more gentlemanly than dram-drinking; but in this country the poor man is prohibited from wine, on account of its price, otherwise he would, in all probability, prefer wine, if it were as plenty and as cheap as in France. In Burns' time, also, intemperance was more common and less reprehended than in ours. Cowley died by lying out drunk in a field one night. Dryden drank hard, in after-life; but wine had no exhilarating effect—while with Byron, it made him "savage instead of mirthful." Parnel, according to Pope, "was a great follower of drams, and strangely open and scandalous in his debaucheries." Churchill was found drunk on a dunghill—Prior was very intemperate, and Pope himself, (according to Dr. King) "hastened his end by drinking spirits." It is true

that these illustrious precedents among the Muses, are no excuse for Burns' irregularity; but it is to be remembered that Burns was temperate while at the plough, and only got accustomed to excesses when he became an author and exciseman. He was affected with intense dyspepsia long before he began to drink inordinately, and probably it was the wretched feeling of hypochondriasis which drove him to the bottle.

"The rapid progress of his disorder, both bodily and mental, is exhibited in the desponding tenor of his letters, from the period of his relinquishing his agricultural pursuits. Indolence, the baneful attendant of morbid sensibility, aggravated his hypochondria. Idleness became preferable to a distasteful occupation; and idleness, as usual, was followed by miseries which rendered existence intolerable without excitement." 287.

His amiable biographer, the late Dr. Currie, has traced the physical and moral deterioration of the Scotch Bard, with an able pen. In hypochondriasis extremes meet. The most ludicrous lines that Cowper ever wrote were indited under the most dolorous feelings. Such bursts of vivacity are by no means incompatible with the deepest gloom. The following picture of himself is by no means misplaced in a medical journal.

"I have been for some time pining under secret wretchedness; the pang of disappointment, the sting of pride, and some wandering stabs of remorse settle on my vitals like vultures, when my attention is not called away by the claims of society, or the vagaries of the muse. Even in the hour of social mirth my gaiety is the madness of an intoxicated criminal under the hands of the executioner." 291.

In another place, writing to Mr. Cunningham, he speaks of "his constitution being blasted, *ab origine*, with a deep incurable taint of melancholy that poisoned his existence." Dr. Currie remarks that—

"Burns, though by nature of an athletic form, had in his constitution the peculiarities and the delicacies that belong to the temperament of genius. He was liable, from a very early period of life, to that interruption in the process of digestion which arises from deep and anxious thought, and which is sometimes the effect, sometimes the cause, of depression of spirits. Connected with this disorder of the stomach, there was a disposition to headache affecting more especially the temples and eye-balls, and frequently accompanied by violent and irregular movements of the heart. Endowed by nature with great sensibility of nerves, Burns was in corporeal, as well as in his mental system, liable to inordinate impressions—to fever of body as well as of mind. This predisposition to disease which strict temperance and diet, regular exercise and sound sleep, might have subdued, habits of a very different nature strengthened and inflamed." 294.

The foregoing observations of Dr. Currie, are deserving the attention of all literary as well as medical men. They may there learn that excess in wine is not the only species of intemperance—and that excessive application to study is no less injurious than inordinate potations of drink.

In October, 1795, Burns, while returning from a tavern, benumbed and intoxicated, caught cold, ending in acute rheumatism, from which he partially recovered; but in the course of the next Summer, though still labouring under the chronic form of the disease, and, most probably, under affection of the heart, at that time not well understood, he was advised by his physicians to go to the sea and bathe there! He followed the advice—and was soon a corpse!

"Thus perished Burns in his thirty-seventh year. Let those who are without follies cast the first stone at his infirmities, and thank their God they are not like the other poor children of genius, frail in health, feeble in resolution, in small matters improvident, and unfortunate in most things." 298.

We have now concluded the first volume of this entertaining and instructive work. The second volume is wholly occupied with a medico-physical examination of the characters or rather temperaments of three distinguished authors—Cowper, Byron, and Scott.

The life of Cowper is more than usually interesting to the medical practitioner, since his character has been tried by all the tests that morality can apply to it, while the corporeal malady which occasioned or influenced his hallucinations, is left unnoticed by his biographers—most of whom were clergymen, and the rest laymen, who were incapable of elucidating the mystery of the Poet's religious dependency, which they have, therefore, left in the same obscurity in which they found it.

This unfortunate being appears to have been of a sickly and infirm constitution from his infancy. At a public school he was tyrannized over by a rascally miscreant, who, being stronger in body than Cowper, kept him in perpetual terror by his conduct. This is the bane of public schools. He was next put, very injudiciously, to the study of the law, and it was in the Temple that he experienced the first attack of a disorder that harassed him through life. This was, as he expressed it, "such a dejection of spirits as none but those who have felt the same can have the least conception of. Day and night I was upon the rack, lying down in horror, and rising up in despair." Who, that knows any thing of dyspepsia, will not acknowledge that this was just as much a corporeal malady as a fever or a toothache? The classics had now no charm for him—change of scene was recommended—and at Southampton the first symptom of monomania became developed—and that on the worst of all subjects, as far as the hope of cure is concerned. On a clear and beautiful morning, the scenery and the refreshing atmosphere inspired a kind of paroxysm of internal pleasure, such as a poetical imagination very often feels, under similar circumstances. He attributes this delight to the Almighty fiat—and to nothing less. But, unfortunately, this transitory emotion of religious joy was only the precursor of future remorse and misery. In fact, the mind was unpoised by corporeal disorder, before this out-break, which was only the first obvious or unequivocal demonstration of the melancholy truth.

"Satan," he says, "and his own wicked heart, quickly persuaded him that he was indebted for his deliverance to nothing but a change of scene, and the amusing varieties of the place; and by this means had turned the blessing into a poison." 20.

From this time his mind became distracted with religious doubts, and ultimately with remorse. He believed that he had committed the "unpardonable sin," and that he had incurred the dreadful penalty of eternal reprobation, for neglecting to improve to his advantage the communion of his sinful spirit with the Almighty at Southampton!!

Alas! how many thousands, or rather millions of our fellow-creatures are torturing their imaginations with similar hallucinations respecting the divine and benevolent author of our existence, who sent us into this world with senses to enjoy the gifts of nature profusely scattered around us, and

with a mild religion that prohibits no innocent enjoyment of them! In a religious point of view, they are as insane as Cowper; and they only want (too many of them not long) the corporeal infirmities of the Bard to render them fit subjects for the lunatic asylum!

In every future paroxysm of his disorder, the terrific notion that, by his misconduct on this occasion, he had forfeited every claim to salvation, became the undeviating theme of his madness. It was his misfortune to be always surrounded by what are called *serious* characters—many of them such pests of society, that they embitter life in this world, without giving the soul any better chance of happiness in the next! We make not this reflection on them in the way of *condemnation*, but of pity for themselves and their disciples. We have no doubt of the honesty and sincerity of their intentions and beliefs; but we consider them as all insane, *in degree*, though, in this world, they are not likely to be convinced of their error, or persuaded to relinquish it.

A situation as Clerk in the House of Lords having been procured for him, he was terrified at the idea of appearing in public, and threw up the place. Though frightened at the thoughts of death hitherto, he now longed for it, and entertained an intention of suicide! He was now decidedly insane; but no medical advice was procured. A divine came, and urged the monomaniac to a "lively faith,"—to which poor Cowper answered—"most earnestly do I wish it would please God to bestow it on me"! As may easily be supposed, these religious conversations and interviews only aggravated the disorder. At length he was placed in a private lunatic asylum, under the care of Dr. Cottin, 1763. In two years he was so much improved as to be left at large, and his mind restored to comparative tranquillity. But, unfortunately, he now placed himself in the family of the Rev. Mr. Unwin, where he was debarred from all society, except that of the SERIOUS! This step had baneful consequences. In 1773, he had another outrageous *paroxysm* of monomania (for we consider that he was never entirely free from it) similar to that at Southampton. He continued to suffer unmitigated miseries for five years, after which his reason was at length restored. From this time till he attained the age of 50 years, his malady assumed the character of mild melancholy, with occasional paroxysms of a graver nature. At the age of 50, he became an author—no great proof, it will be said, of a sound mind! Contrary to expectation, he appeared before the public in this new and arduous character, with little or no anxiety. In 1782, he fortunately became acquainted with Lady Austin; and in her society he found great delight. His dejection became quickly banished, and his health evidently improved. Had such an event happened 20 years sooner, the consequences might have been most happy! She asked him to write a poem in blank verse. "What is to be the subject?" said he. You can write upon any thing, was the answer—write on the sofa where you now sit. The result is well known. Had he had such a friend at an earlier period, the history of his life would have assumed a different complexion. But he parted from Lady Austin, and Mrs. Unwins died. So did his father and brother; but with few symptoms of sorrow on the part of the hypochondriac, whose own feelings of misery were too intense to permit much participation in the fate of others.

Among the misfortunes of Cowper was that of living nearly 20 years at

Olney, in an atmosphere tainted with malaria! In 1787, he had another acute paroxysm of monomania, evidently connected with corporeal disorder —especially affection of the head, accompanied, or rather preceded, by giddiness and pain. The following passage from Mr. Madden is deserving of quotation.

"It is well worthy of observation, that in this and every other similar attack of his dreadful depression, head-ache and giddiness are spoken of as the premonitory symptoms of his disorder. But it does not appear that local depletion, or any other effective means, were ever resorted to, to obviate or prevent his sufferings, which were evidently the effects of determination of blood to the head, or probably the chronic effects of that determination—of effusion and pressure on the brain—the not unlikely source of all his miserable feelings. On one of these occasional attacks, the composition of theological essays are recommended to him; on another, the translation of spiritual songs; on another, the production of a volume of original hymns; but at any of these periods the services of a cupper, and the judicious care of a physician, might have proved of more advantage." 83.

He had scarcely recovered from this attack, when the Rev. Mr. Bull, (one of his *serious* friends, or rather *destructive* enemies) importuned the religious monomaniac to compose a set of hymns!! "Ask possibilities (replied Cowper) and they shall be performed; but ask not hymns from a man suffering with despair, as I do. I would not sing the Lord's song, were it to save my life." We are tempted to go farther into the life of Cowper than we otherwise should, because there are, in our own profession, an increasing number of "psalm-singers," who would zealously pursue the same course of conduct which destroyed Cowper! Muddle-pated, narrow-minded, bigotted, enthusiastic—perhaps hypocritical physicians, who are, for ever, thrusting their religious dogmas into the minds of their patients, while drenching their bodies with physic! We have no patience with such personages. Those who are sincere, are fools—those who are not so, are rogues.

In the beginning of 1791, he had another attack. His translation of Homer had mitigated his sufferings, and the publication brought him into acquaintance with Hayley, who avers that Cowper, now in his 61st year, appeared to feel none of the infirmities of advanced life—being active and vigorous in mind and body. In January, 1794, his forebodings were realized. A severer attack than any that preceded, paralyzed his mental powers, and they never afterwards recovered. He lingered out a miserable existence, and died of dropsy, in May 1800, aged 69 years.

The conclusion is easily summed up. From his earliest infancy, Cowper was of a delicate constitution and timid disposition. Excessive application to professional studies in the Temple, injured his health, and disturbed the functions of the nervous system, so as to lay the foundation for that morbid sensibility which rendered his life a scene of wretchedness. Hypochondriasis ensued, and mounted into occasional paroxysms of acute monomania. In the intervals, he was rarely, if ever, free from chronic monomania of the religious kind. Finally, he was most unfortunate in having those around him, who aggravated his mental malady by the most injudicious arguments and reasonings. Had he been a poor man, and confined in a lunatic asylum, he would soon have been cured. Or, as it was, had he lived in the present day, he would have got well under proper medical treatment, and by protection from the society of *serious* persons!

BYRON.

It is not our intention to dip far into the *infirmities* of this genius. Byron soared too high for our optics to follow his ætherial flights about the summits of Olympus. If Cowper was religiously mad, Byron was irreligiously so:—if the former was a fanatic, the latter was a sceptic, if not something worse. Cowper was always repenting of sins that he had never committed —Byron had probably little regret, except at the inability of indulging in what Cowper would have considered unpardonable sins.

We have no doubt that Byron's eccentricities, and his real or feigned misanthropy depended much on some corporeal disorder, though that elucidation seems never to have entered the minds of his biographers.

"His symptoms have indeed been noticed under various names, when productive of any extraordinary and palpable effect, but they have been so indefinitely described, that nothing but medical investigation is competent to a solution of the difficulties they present. In one place we read of his being subject to an hysterical affection, in another of his being carried out of a theatre in a convulsive swoon; elsewhere, of an apoplectic tendency, attended with temporary deprivation of sense and motion; at another time, of nervous twitches of the features and the limbs, following any emotion of anger, and from trivial excitement, and slight indisposition, of temporary aberrations of intellect, and delirium; but no where do we find the cause of these phenomena plainly and intelligibly pointed out, nor the real name given to his disorder, till his last and fatal attack. The simple fact is, he laboured under an epileptic diathesis, and on several occasions of mental emotion, even in his early years, he had slight attacks of this disease. If feelings of delicacy induced his biographers to conceal a truth they were aware of, or deemed it better to withhold, their motive was unquestionably a good one; but it was nevertheless a mistaken delicacy; for there are no infirmities so humiliating to humanity as those irregularities of conduct in eminent individuals; and the only palliation they admit of is often precluded by our ignorance of the bodily disorders under which they may have laboured." 130.

This epileptic diathesis was probably hereditary, and derived from his ill-tempered mother. He had not regular recurrences of the complaint; which, like masked gout, only produced slight seizures, and a host of anomalous phenomena, when the mind was excited, or the body weakened by excesses. "In boy-hood, the most trivial accident was capable of producing sudden deprivation of sense and motion." Two months before his death, he had a regular and severe convulsion, in the presence of Captain Parry, and in Colonel Stanhope's room. With such a morbid diathesis, a devotion to literature, and especially to poetry, would be very apt to produce that melancholy, morbid sensibility, and sarcastic temper, so conspicuous in Byron. For such a man society had few charms. He made a merit of his aversion from social intercourse, and prided himself on being independent of the frivolous amusements of the world. His self-concentration led him to think his own mind all-sufficient for his individual felicity—and a refined selfishness became the most prominent feature of his isolated feelings.

"The question of Byron's hypochondria no one can dispute, who has perused his journals. Its various Protean forms are there set forth in language which affectation could not forge, nor fiction mimic. 'What can be the reason,' he says in his journal, 'I awake every morning in actual despair and despondency? In England, five years ago, I had the same kind of hypochondria, but accompanied with so violent a thirst, that I have drank as many as fifteen bot-

tles of soda-water in a night, after going to bed.' This unaccountable dejection without a cause, this constant waking in low spirits, he frequently alludes to, and expresses an apprehension of insanity; in his own words, of 'dying like Swift, at the top first.'" 157.

There is as little doubt that Byron's disorder was greatly aggravated by errors of diet, and inattention to proper regimen. On this last subject, indeed, he entertained the most ridiculous notions. He believed the rigid abstemiousness of an anchorite to be compatible with the most profuse expenditure of nervous energy—and that the exhaustion of the mind was only to be balanced by exertion of the body. He sallied, however, from one extreme to the other—fasting whole days, or living on bread and cheese—and then drinking "five fathoms deep," and plunging into excesses of various kinds, without limit. Latterly, indeed, when harassed by an irregular intermittent or remittent fever, Lord Byron appears to have acted with more than usual imprudence. He took a cold sea-bath in January, and in the night, and continued in the water for a considerable time. After this he was soon seized with rheumatic fever. It appears, too, that he was in the habit of taking opium, by which the tone of his stomach was injured. He was, in fact, a martyr to indigestion. In his last illness, to slow and irregular remittent—perhaps rheumatic fever, was added, if the history and dissection be fairly detailed, inflammation of the brain. We believe he was injudiciously treated—but we do not agree with Mr. Madden, that his death was occasioned by abstinence and bleeding. Few, indeed die of such a cause; but thousands fall victims, annually, to want of depletion and too much sustenance. In Lord Byron's case, the depletion was too late—and consequently was useless, perhaps injurious. The medical treatment, in other respects, was vacillating and inert. He had no confidence in his medical attendants, and they, of course, had no influence or control over his conduct. Be this as it may, the life of the celebrated Bard was embittered by corporeal ailments, and there is no doubt that his temper was soured by the same. The tenor of his writings was tinctured by the state of his health; and had the poet been free from corporeal and mental irritation, the probability is, that his writings would have assumed an entirely different complexion, breathing sentiments of philanthropy and piety, instead of misanthropy and infidelity.

Sir Walter Scott.

When we came to the last character introduced by Mr. Madden as an illustration of the "infirmities of genius," we closed the book and began to ponder in our own minds. We asked ourselves, "what are the incidents in the life of the Northern Wizzard, that can furnish food for Mr. Madden on this point?" We could not immediately call to mind any proofs of *infirmity* in the Caledonian Bard, except two—the committal of his property to the care of a bookseller, and his health to the influence of a Sirocco or Tramontane at Naples. On these two points we have no doubt that Sir Walter was insane—or, at all events, that he evinced "infirmity of genius," to a most deplorable extent. This was the more wonderful in a Scotchman, whose head always displays the organ of *prudence*, or, as the Phrenologists will have it, the organ of *acquisitiveness*, in a state of extreme development.

On recurring to Mr. Madden, we found that he winded up his illustrations of the "infirmities of genius," by adducing an instance where these infirmities were almost entirely absent. The life of Sir Walter Scott is brought forward as an example for literary men to imitate—as a specimen where the labours of the mind are combined with relaxation or salutary exercise of the body, so as to counteract the injurious effects of study. But there were circumstances in the physical as well as the moral constitution of Scott, which enabled him to go through immense literary labour without injury to his health.

"Scott's sensibility," says Mr. M. "fortunately for his felicity, was not of that intense description that its tranquillity was staked on the hazard of his literary success, or that the labour of composition was coupled with the anxieties of authorship, the ardour of enthusiasm, or the ecstasies of successful genius. In this respect Scott had the decided advantage over the majority of the *genus irritabile* of authors, whether of works of prose or poetry. Pope could not proceed with certain passages of his translation of Homer without shedding tears. Metastasio was found weeping over his Olympiad. Alfieri speaks of a whole act in one of his plays written under a paroxysm of enthusiasm, weeping while he wrote it. Dryden was seized with violent tremors after the composition of his celebrated ode. Rousseau, in conceiving the first idea of his Essay on the Arts, felt the disturbance of his nervous system approaching to delirium. Buffon could not enter on a work which absorbed his faculties, without feeling his head burn, and his features becoming flushed. Beattie, after the completion of a volume of metaphysics, never had the courage to look into the book when it was printed, so great was the horror of his undertaking. Goldoni says he never recovered from the exhaustion of his spirits after the production of sixteen comedies in one year. Smollet by over-excitement disordered his brain, and laboured for six months under a coma vigil. These and many other instances have been enumerated by D'Israeli in his admirable work. Scott, however, was luckily exempt from the excitement of such morbid feelings, and from the delusions which are the consequences of them. It is but a step, it is said, which separates the fervour of enthusiasm from the frenzy of insanity, and not unfrequently are the children of genius found tottering on the verge of that calamity. Tasso held a conversation with a spirit gliding on a sun-beam, and we are told by Thuanus, he was frequently seized with fits of distraction which did not prevent him writing excellent verses. Malebranche heard the voice of God distinctly within him. Lord Herbert interrogated the Deity about the publication of his book, and in a kneeling posture calmly awaited the reply. Pascal often started from his chair at the appearance of a fiery gulf opening by his side. Luther conversed with demons, and on one occasion threw an inkstand at the devil's head, an action which his German commentator greatly applauds, because there is nothing the devil hates so much as ink. Descartes, after long seclusion, was followed by an invisible person calling on him to pursue the search of truth. Swedenburgh not only walked over Paradise, but has given a description of the fashion of the houses; but the glorious egotism of Benvenuto Cellini, says D'Israeli, outstripped the visions of all his predecessors, for he was accustomed to behold a resplendent light hovering over his own shadow." 221.

From all these illusions Sir Walter was free. But the mania of speculation—the mental epidemic of 1825—reached even to Abbotsford. The rage for building, embellishing, planting, and collecting objects of antiquity, led to an expenditure of fifty-thousand pounds—and the embarrassment compelled the Bard of the North to have recourse to other than literary means of increasing his income. Fortune, in short, began to be

weary of her smiles, and the long unclouded horizon of Sir Walter became darkened by adversity. The noble resolution of working for his creditors, after this period, enhanced his moral character, but diminished his fame, and ultimately put a period to his existence. He was thenceforth a literary slave—toiling with his intellect to repair the losses occasioned by the imprudence of others! It was a state of existence far worse than that of the African in the West Indies. When *his* daily labour is over, he has no care—no thought—no anxiety or sorrow. But to work by the midnight lamp, exhausting our intellectual energies for the profit of others, is a terrible species of slavery, and the effects were soon visible in the literary labours of Sir Walter Scott! Every successive publication was a fainter emanation of his extraordinary genius, and the last of his productions was the feeblest gleam of its departing glory!

To recruit his health he was kindly, but imprudently urged to make a tour in Italy. With an organic disease of the brain (ramollissement) nothing could be more injudicious than travelling through a land where the elements of moral and physical excitement are so numerous and concentrated. The consequences were such as might have been expected. His health was improved by the voyage to Naples; but his journey through Italy and homeward completed the tragedy. A second paralytic seizure, while descending the Rhine, put the finishing stroke to the malady in the brain, and from it he never recovered.

We have done as much justice to Mr. Madden as could reasonably be expected in a Medical Review. The work is a desideratum for the literary classes of society, and we strongly recommend it to the patronage of our professional brethren, as well entitled to their attention.

III. *(bis.)*

WORKS ON MORBID ANATOMY.

I. Anatomie Pathologique du Corps Humain. Par *J. Cruveilhier*. Dix-septieme livraison, &c.

II. Principles and Illustrations of Morbid Anatomy. By *J. Hope*, M.D. F.R.S. &c. &c. Part VI.

These have been published since our last number, and it is not a little singular, that at one and the same time, fasciculi of three distinct works on morbid anatomy should appear periodically in London and in Paris. We have alluded to the characteristic features of each, and we need not do more at present than give a succinct account of the fasciculi before us.*

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* We had intended to have noticed some valuable French works which we have received, in the present number. Circumstances have compelled us to defer them until our next, when the recent volumes of M. Velpeau, M. Dugés, and the Memoirs of the Academy of Medicine will be brought before our readers.

And first of that of M. Cruveilhier. The subjects illustrated are—Diseases of the Brain in the Fœtus—Diseases of the Bladder and Prostate—Diseases of the Muscles—Diseases of the Heart and Aorta—and Diaphragmatic Hernia. These subjects are for the most part treated so briefly, and are of so miscellaneous a character, that we have thought it better to notice them in another part of this Journal, to which we must refer our readers.* The one which we shall select for notice here is,—

PUERPERAL INFLAMMATION OF THE MUSCLES AND SYNOVIAL MEMBRANES.

The researches of M. Dance, M. Velpeau, and others on the Continent, and of Dr. Lee in this country, have done much to disseminate accurate notions of what is termed the puerperal fever. How inexact and unphilosophical those notions were, prior to the recent dissections, might readily be proved by a reference to the over-rated work of the late Dr. Gooch. The secondary inflammations after parturition resemble in almost every respect the inflammatory deposites that succeed to injuries and operations. It is well known that after their occurrence or performance, the lungs, the liver, the serous and synovial cavities, the cellular tissue, and the muscles, especially the gastrocnemii, are the seats of inflammation, sloughing, or collections of matter.

M. Cruveilhier terms this affection of the muscles or of the synovial membrane, after parturition, rheumatic. The analogy is evidently false, and the term reprehensible. With this protest, we will, for convenience sake, employ his term "puerperal rheumatism."

Puerperal rheumatism appears at different periods after accouchement—sometimes immediately—sometimes before, during, or after the milk fever. It may occur alone—in the course of acute or chronic puerperal peritonitis—or of acute or chronic puerperal pleurisy—or during the convalescence from these diseases. It often coexists with the presence of pus in the lymphatic uterine vessels.

Being often attended with œdema, it is frequently confounded with phlegmatia dolens, which appears to M. Cruveilhier to be always the effect of phlebitis.

Puerperal rheumatism has a marked deposition to terminate in the formation of pus, especially in hospitals. The purulent collections multiply, and when one seems relieved, others appear, the patient dies, and dissection discloses the muscles infiltrated with pus, the articular and thecal synovial membranes filled with it, and the articular cartilages ulcerated and destroyed.

The puerperal inflammation of the synovial membranes may be latent, like that of the pleura and peritoneum.

Puerperal rheumatism may exclusively attack the cellular membrane enveloping, and forming a sort of atmosphere to the muscles.

The phlegmatia dolens, or œdema lactantium, is not a primitive disease, but merely a symptom, either of phlebitis, or of inflammation beneath the fascia.

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* Periscope, p. 512, et seq.

M. Cruveilhier is tempted, from many facts, to believe that synovial inflammations are often a sequence to formation of pus in the uterine lymphatics and their glands.

A fact related by M. Cruveilhier appears to him to prove—1, that inflammation and purulent effusion in the uterine lymphatics may be cured; 2, that pus may exist with absolute impunity in these vessels, or, at all events, with greater impunity than in the veins; 3, that inflammation and purulent collection in the lymphatics may occur, independently of peritonitis.

Three cases are related by M. Cruveilhier, and delineations of the morbid appearances in the muscles are appended. We will cast a rapid glance at the cases.

Case 1. The patient aged 31. Accouchement Sept. 4, 1830. On the next day shivering, followed by slight abdominal pain. On the 6th, slight hypogastric pain; pulse 120. On the 7th, pain in the left leg, increased on pressure—thirst—abdomen tympanitic. On the 8th, pain in the left foot. In the night of the 9th, delirium. On the 10th, expression rather altered, tongue dry, some involuntary stools, pulse 100. 11th. Patient thinks herself getting well—slight deririum. 12th. Vomiting and pain at the epigastrium. 13th. State of prostration. Death in the evening, 9th day after confinement.

Autopsy. Slight effusion of lymph and pus in the cavity of the peritoneum—pus in that of the pelvis. On the sides of the uterus, in the broad ligaments, and along the fallopian tubes, lymphatics, filled with pus. Uterine veins healthy. Much blackish fluid in the left side of the chest. Subcutaneous cellular tissue of the left leg infiltrated with yellowish serum. Articulations of the ankle and tarsal bones filled with pus. Tendinous sheaths of the flexor communis, flexor proprius, and tibialis posticus filled with pus.

Case 2. Patient aged 25. Second accouchement March 3d, 1832. No complaint till the evening of March 11th, when there were pain and swelling of the left knee. 12th. These symptoms increased, with fever, pulse small and frequent, pulmonary catarrh. 14th. Œdema, with pain, of the whole lower extremity—face sallow—respiration hurried. 20th. Œdema less, knee and whole lower limb, especially the leg, tender on pressure—pulse frequent, sometimes intermitting. 22d. More violent pain in the knee—small phlyctenæ on the back of the thigh and leg—sore throat. During the next days, sloughing, where the phlyctenæ were. On the 30th, the knee-joint opened with caustic, and much pus let out. Death in the night of the 31st.

Autopsy. Large collection of pus between the muscles of the thigh and the bone, communicating with the interior of the knee-joint, and extending down the leg, above and beneath the soleus. Pneumonia at the base of the right lung. Pus in the ovaria. Pus in the lymphatics of the broad ligaments—in the lumbar glands—in the lymphatics on the psoas—in the glands at the obturator foramen.

Case 3. A washerwoman, aged 25. Third accouchement Jan. 19th, 1832. In a few hours afterwards acute hypogastric pain. Next day tenderness on pressure of the hypogastric and iliac region—pulse frequent. 21st. Pain of abdomen, though not constant—abdomen swollen—herpes labialis—pulse very frequent. 22d. Slight delirium. 25th. Pain in the wrist joint, with little tumefaction—agitation. In the following days the swelling increased and extended to the hand and forearm. Feb. 5th. Fluctuation around the joint. 10th. Opening made, and great quantity of pus let out. Pain in the inferior part of the leg and foot. 14th. Two subcutaneous abscesses on the inside and outside of the leg—another in the substance of the muscles on the posterior part of the forearm. Pyrexia and sweats. 18th. Death in great anguish.

Autopsy. Pus in the radio-carpal and carpal articulations, along the tendons and muscles of the fore-arm, in the substance of the muscles of the thumb and little finger. Cartilages of the articulations absorbed. Abscess in the extensor communis digitorum. Abscesses in the subcutaneous cellular tissue of the leg. Pus in a dilated lymphatic on the right edge of the uterus.

We have not related the treatment of these cases, because they are intended to illustrate pathological facts—the lesions that may follow parturition, and the general character of the symptoms that attend them. It is almost unnecessary for us to repeat, that they are, to all appearance, identical with the secondary lesions from injuries and from operations.

We now proceed to the consideration of the second work upon our list, that of our able friend Dr. Hope.

It is the sixth faciculus of Dr. Hope's work, published in August of the present year. It is dedicated to diseases of the alimentary canal below the diaphragm. These diseases are divided into, 1. Lesions of circulation. 2. Lesions of nutrition. 3. Lesions of secretion. In the first division are comprised hyperæmia and anæmia; in the second, hypertrophy, atrophy, softening, ulceration, perforation, and changes of capacity; in the third, morbid secretions in the mucous membrane, and morbid secretions beneath the mucous membrane. This will give an idea of the subjects comprised in this fasciculus. We will endeavour to select such portions as may appear particularly curious or important.

Hyperæmia, or Redness of the Alimentary Canal.

It is highly necessary to determine what is, and what is not, a natural degree of redness. Those who are in the habit of witnessing post-mortem examinations, must often have had occasion to remark the differences of opinion on this point. Dr. Hope very properly draws attention to what may be considered the natural state of the intestinal mucous membrane, in life and death.

"The intestinal mucous membrane of a living animal, during a tranquil state of the circulation, is observed to be of a red tint somewhat deeper than that of the mucous membrane of the cheek in a healthy man. This tint is replaced by uniform paleness, or, at the utmost, by a delicate rosy tinge when the animal is deprived of life without much loss of blood, which causes preternatural paleness, and without asphyxia, which causes mechanical injection. It thus appears that the mucous membrane, like the skin, tends to become pale after death. Accordingly, in the human species, as well as in animals, it has been found of this colour in most cases of accidental death occurring during a state of perfect health.

The pale colour, however, has not the same shades in all parts of the canal and at all ages. In the stomach, and still more in the great intestine, of the adult, it presents a dead white hue, while in the duodenum and jejunum it is of an ashy or greyish white, which diminishes towards the end of the ileum. Such, then is the natural colour in the adult.

In the fœtus and very young infant, the membrane is tinged of a rose-colour, which, gradually diminishing, is replaced in children by a milky and satiny whiteness; this becomes dimmer towards puberty, and, in the adult, passes into the ashy-grey shade above described. In the aged, the grey colour becomes more decided and general, being in some measure dependent on the dilated and congested state of the submucous veins, which impart a colour to the super-imposed membrane. In extreme old age, however, and in young children who have died

of marasmus, the *maximum* degree of paleness is sometimes observed, being connected with the anæmia which exists under both these circumstances. I recently saw the intestine of an old man as white as if it had been long in maceration." 148.

Such, according to Dr. Hope, and we suppose that it may be considered a fair approximation to truth, is the natural tint of the mucous membrane. The next point considered by our able and industrious author is hyperæmia, independent of disease in the canal. This includes, of course, two conditions, which have attracted much attention and excited some discussion of late years—staining and congestion.

The causes enumerated by Dr. Hope, as capable of imparting a red colour to the alimentary canal, and operating before death, are—

1. *Digestion.* The redness which this process is well known to occasion continues, to a certain extent, after death, for, in the part where the process was going on at the moment of dissolution, the mucous membrane presents a beautifully delicate rose colour. This is not very appreciable below the duodenum.

2. All circumstances opposing the free return of the venous blood from the intestines to the right side of the heart; namely, asphyxia,—obstructions of the vena portæ, whether by disease of the liver, tumours situated in the course of its principal intestinal divisions, or coagula in the vein itself; strangulation of the intestines; organic disease of the heart, and affections of the lungs, attended with considerable dyspnœa. Asphyxia operates more or less in almost every case of slow and difficult dissolution. The redness from these causes is less, of course, in proportion as the body is exsanguined. The degree varies according to the intensity of the cause. In the lowest degree there is nothing more than a bluish intumescence of the larger submucous veins; certain branches in the mucous membrane next become injected, presenting the different gradations of ramiform vascularity; finally, the capillary net-work is completely affected, and the result is a uniform red stain. These characters generally pervade a large extent of intestine: but if circumscribed, which is rare, they may form bands, patches, streaks, spots, or mere points: every appearance, in short, which we see produced by inflammation.

Redness, occasioned after death, is referable to two principal causes—1, gravitation of the blood; 2, its transudation through the parietes of its vessels.

Gravitation to the most dependent parts of the intestines invariably takes place, in whatever position the animal may have been placed. It commences immediately after death, and continues till the blood has cooled down to the point of coagulation, and, consequently, will be greater where the temperature has been artificially or naturally maintained longer than usual, or where the blood remains preternaturally fluid. It will also be greater in subjects abounding in blood, than in those affected, previous to death, with congestion of the portal system.

Transudation of blood through the walls of the vessel commences simultaneously with putrefaction, and takes place in vessels of all calibre. Thus it forms the red spots almost always observed along the veins of the greater extremity of the stomach, when the subject is examined more than thirty-six or forty hours after death. These spots, extending and coalescing, constitute

multiform groups, bands, streaks, &c.; and eventually, not only the tract of the vessels, but the whole surface of the organ becomes more or less uniformly tinged. When there is much congestion of the vessels, the mucous membrane, and, equally, all the other coats may become thoroughly soaked and reddened. Complete transudation may take place within the brief space of twenty-four hours, provided putrefaction be favoured by a high summer temperature and atmospheric humidity. Under such circumstances blood may even transude into the interior of the canal. Transudation from the spleen also, particularly when the blood of this organ is very liquid, may communicate a stain to the stomach.

Our author appends from Billard a comparative table of the characters of congestive and inflammatory redness.

Blood, exposed to gases developed in the intestines, undergoes such changes of colour as it would do, if exposed to the same gases in a bladder. The prevailing colours are various tints of green and brown. A rich yellow colour is not unfrequently imparted to the stomach and intestines by the bile, which produces a stain of the mucous membrane, incapable of being removed by washing. Yellow patches or bands of greater or less extent are sometimes seen in the mucous membrane of the duodenum or jejunum in its healthy state. Billard thinks that they take place subsequent to death.

Dr. Hope proceeds to describe hyperæmia of the alimentary canal from disease. The alterations of colour produced by inflammation are reducible to four principal species, namely, red, brown, slate-coloured, and black, between each of which there are intermediate shades.

The red colour presents several varieties of aspect which may be characterised as—1, ramiform injection; 2, capilliform injection; 3, redness in patches; 4, diffused redness; 5, speckled redness; 6, streaked redness. The redness produced by inflammation differs in this great feature from that produced by congestion—the capillaries are injected, while the vessels of large diameter are devoid of colour.

Ramiform injection is the result of a slight irritation only, and is either the first trace of a mild incipient inflammation, or the vestige of a more severe one which is subsiding. Capilliform injection implies a greater degree than the former, the capillary ramifications being affected. Redness in patches is an evidence of inflammation of high intensity. Seated in the great intestines, particularly at their lower part, it is the most common morbid alteration produced by simple dysentery; in the ileum it is attended with symptoms of enteritis, and is common in fever. Passive redness in patches is rare. Diffusive redness is the result of a higher degree of inflammation than any other variety. It is completely removed by maceration for twenty-four hours, an evidence of the acuteness of the inflammatory action. This is more likely than the other varieties to be confounded with passive congestion, because the latter is likewise commonly diffuse. The mucous membrane may acquire a diffuse red stain from blood effused into the canal, and from certain colouring liquids taken either as food or medicine, for instance, black currants, infusion of logwood, &c.

Speckled redness has not inaptly been compared to the section of an inflamed brain. It is probably produced by extravasation from a certain number of minute vessels of the mucous membrane, taking place on the

first inflammatory impulse. It may therefore be regarded as the vestige of only slight inflammation. Streaky redness is not very common. The summits of wrinkles in the stomach, and of the valvulæ conniventes in the parts below are its ordinary seats.

Dr. Hope next alludes to two sub-varieties of hyperæmia, namely, of the villi, and of the follicles. The account of either of these is taken from Andral, and we need not transcribe it.

Dr. Hope remarks that it is difficult to determine in all cases whether the colouring of the alimentary canal depends on acute, or on chronic inflammation or irritation; but it may be stated in general terms, *first*, that the red colour belongs principally to acute disease, though it is not uncommon in chronic, as, for instance, in protracted diarrhœa; *secondly*, that the brown, slate-coloured, and black belong almost exclusively to chronic disease, though they may also be occasioned by acute inflammation, especially that produced by certain poisons.

Our author next proceeds to the description of the brown, the slate colour, and the black. This, in nine cases out of ten, according to Billard, originates in inflammation, and indicates a chronic state of it. It usually presents either a diffuse or a streaky and marbled aspect. When the result of inflammation, it is commonly attended with thickening and facility of detaching the mucous membrane; when following very acute inflammation, the membrane is softened, almost to a pulp. The slate colour is also found to be in nine cases out of ten the result of chronic inflammation. Whether the black colour can result from stagnation alone, or whether the presence of some other morbid agent, as inflammation or irritation be necessary, cannot be positively determined.

"Of inflammatory hyperæmia, in general, it may be stated that certain parts of the alimentary canal are more subject to it than others. The stomach and the lower portion of the ileum come first in the scale of frequency; then follow, successively, the cæcum, the colon, the rectum, the duodenum, the superior part of the ileum, and the jejunum. (Andral.) This scale accords with the results of my own observation." 163.

The remainder of this Fasciculus is occupied with the consideration of softening of the alimentary canal. The following is the natural condition of the mucous membrane, according to Andral.

"In the stomach, says Andral, we may allow the mucous membrane to be of the natural thickness, when, on making an incision in it, without dividing the sub-mucous cellular tissue, we can easily detach pretty considerable shreds with a forceps: the shreds should be larger in the pyloric, than in the splenic portion.

In the duodenum, a difference in the nature of the membrane, probably connected with the greater abundance of mucous follicles, renders us unable to detach so considerable shreds as in the stomach.

In the rest of the intestines, the rectum excepted, the mucous membrane, even in its natural state, breaks and tears whenever we attempt to detach any portion of it. If the membrane should become attenuated in consequence of a general defect of the nutritive powers, it at the same time becomes softer, without the previous or present existence of any process of irritation." 164.

Softening from putrefaction, and softening by the gastric juice, are considered previously to softening by disease. The former seldom takes place before the eighth or tenth day, and therefore if softening is observed much earlier there has been some other cause. Softening from the gastric juice

we need not particularly advert to, as the subject has long attracted attention.

Softening by disease may be confined to the mucous membrane alone, or may extend through all the coats.

Softening of the mucous membrane alone is more frequent and more marked in the stomach than elsewhere. Sometimes it is general, more frequently partial, and the splenic portion of the organ is most liable to it. The veins are often dilated, and the blood curdled in them. Occasionally this softening forms only isolated spots, half an inch or less in diameter, of irregularly circular form, and either redder or whiter than the surrounding membrane. Sometimes softening occurs in lines, streaks, or sinuous bands.

The colour is thought by Dr. H. to depend on the previous tint of the membrane. Softening may be the result of either acute or chronic inflammation, or of a process not manifestly inflammatory. When the result of acute inflammation, the symptoms are those of acute gastritis or enteritis. Softening from chronic inflammation is attended with the symptoms of chronic inflammation. Softening, however, may occur without symptoms of inflammation at all, in the advanced stages of many chronic diseases, especially of the lungs.

"I have so frequently noticed the following train of symptoms in the extensive Institution to which I am attached, and which, independent of patients, contains several hundred old people, that I am induced to offer Andral's account in his own words: 'Softening of the mucous membrane of the stomach appears to me to be a common affection in old people whose digestion becomes disordered, their health having previously been very good. Their appetite first diminishes, they then lose it entirely, and, soon after, begin to feel the greatest dislike to all kinds of food. They experience a constant feeling of uneasiness and weight, rather than actual pain, in the region of the stomach; and their tongue, which is usually natural, or else more or less thickly coated, grows red and dry occasionally. This state may continue for several months; the pulse then becomes more frequent, a considerable emaciation takes place, the strength rapidly declines, and the patients die without showing symptoms of a serious affection of any organ up to the last moments. On opening the body, there is nothing found but a more or less considerable softening of the mucous membrane of the stomach, with or without injection of its tissue.'

In the remainder of the alimentary canal, precisely as in the stomach, chronic softening is often extremely ambiguous in its symptoms; as it sometimes occurs independent of pain or derangement of function in any marked degree; and, on the other hand, these symptoms are of common occurrence independent of softening. Instead, therefore, of outstripping the progress of science by premature attempts to define the connexion between the lesion and its symptoms, it is more prudent to confine ourselves to observation until we are in possession of more satisfactory data." 171.

Softening of all the coats of the gastro-intestinal parietes has been accurately described by Cruveilhier, who saw it prevail epidemically amongst the young children at Limoges. This softening may present any colour, and may take place at any period of life. It occurs most frequently in the splenic portion of the stomach, but has also been found in various parts of the small intestines, cæcum, and colon.

We have noticed the letter-press of this fasciculus so freely, that we have no space for commendation of the plates. We can only say that they equal their predecessors, and that is no mean praise.

IV.

The Analysis of Inorganic Bodies. By *Professor Berzelius.* Translated from the French, by *G. O. Rees.* London, 12mo, pp. 164.

Every work coming from the hands of so great a master of his art as Berzelius carries along with it its own recommendation. There is no need of any encomiums to introduce it to public favour; the name of its author is sufficient. The distinguished Swede is admitted by every one to be "facilè princeps" in the field of chemical analysis, to which he has given almost the exactness of mathematical research. The little volume now before us forms part of the 12th volume of the author's elementary chemistry; but as it forms a complete and very admirable treatise on that branch of the science which is devoted to the analysis of inorganic bodies, the translator has done well to detach it from the great work, for the benefit of those who engage in the practical details of this delightful study. To all such, it is an indispensable companion and instructor, pointing out what is to be done, and the manner of doing it. As well might a botanist go into the fields to collect and ascertain plants without a Flora in his pocket, as a chemical student enter upon the labours of the laboratory without a manual to direct him; and of all the manuals hitherto published, the one before us is alike the cheapest and the best.

In the present day, when the attention of medical men is once more specially directed to the composition of the animal fluids, and when the foundations of a rational and restricted humorism are probably again laid, or are in the act of being so; and moreover, now that the standard of professional qualifications is daily becoming more and more scientific, as appears from the existing rivalry of the different schools and universities throughout the kingdom, it is highly important, if not absolutely necessary, that a competent knowledge of manual chemistry be acquired by all. We are glad to observe that this study is becoming more popular, and that numerous classes have recently been established for its institution. If the knowledge of the science be considered, as it most properly is by all, a necessary branch of medical education, surely a practical acquaintance with the facts on which the science is built, or, in other words, with the art of chemistry, is equally or still more so.

Do we not recognise the truth of this position in the cases of anatomy and of materia medica? Do we not require that the student take the scalpel into his hand, and diligently and patiently examine for himself every part, that he may know them by sight and by feeling, as well as that he may describe them with accuracy and minuteness? And again, are we satisfied with his skilful answers about the names, localities, uses, compositions, and so forth, of the different drugs in the Pharmacopœia? No, we expect and insist that he should have handled each and all of them, that he can recognize them at once, and be acquainted with the manipulations of preparing and of exhibiting them. Surely, then, it is of equal, or rather of still higher importance, that he be well informed in the details of practical

chemistry. How, we ask, can a medical jurist dispense with it? and none of us can know when we may be called upon to act as such. Is not the army and naval surgeon frequently desired to investigate and report upon cases of poisoning? and how can they do so, unless they know the tools that they must work with, and the right method of using them?

But even in ordinary and every-day practice, a scientific physician requires his test-tubes and his box of re-agents. In diseases of the urinary organs, a knowledge of the chemical changes in the water is of the first consequence; in dropsy it is equally so; and full well we all remember its interesting applicability to the etiology of cholera.

As a sample of this deserving volume, we select the catalogue of rules to be followed in the examination of mineral waters by re-agents;—premising, that they are equally illustrative of the analysis of urine, or of other animal secretions. We are directed first to observe the colour and transparency of the fluid; its smell, especially after it has been well shaken; and its taste, which may be saline, bitter, or like that of ink.

We should then take thirteen glasses, or test tubes, "ten are filled with the fresh water for examination, and three with prepared water that has been boiled at least for half an hour, and that has been filtered after cooling. The following re-agents are next dropped into the glasses:—

First.—Tincture of turnsole (prepared with cold alcohol and cakes of turnsole: alcohol preserves the tincture unaltered for a length of time.) When the water into which a few drops of this tincture have been thrown assumes a red shade, the presence of a free acid must be concluded: if, on the addition of a greater quantity of tincture, the reddish liquor assumes a bluish tint, the quantity of acid is small; and if the reddened water becomes blue again after from twelve to twenty-four hours, and the tincture of turnsole added to one of the glasses containing the boiled mineral water does not become red, the acid contained in the water was the carbonic: a dark permanent red colour denotes the presence of a metallic salt.

Second.—Lime water saturates free carbonic acid, so as to occasion a precipitate of neutral carbonate of lime: the earths and metallic oxides which had been dissolved in the carbonic acid precipitate at the same time. If the water contain free carbonic acid, the precipitate is redissolved by the addition of a sufficient quantity of this water. In order to make the experiment well, it is commenced by allowing a few drops of lime-water to fall into the water: the troubling which is at first occasioned afterwards disappears. If the water do not contain free carbonic acid, but only bicarbonates, the troubling caused by the lime water does not disappear, whatever quantity of the mineral water may be added. The majority of Swedish waters that I have examined, containing carbonic acid, act in this manner.

Third.—The tincture of Brazil wood passes from a yellowish brown to a beautiful red when the mineral water contains an alkali or an earthy carbonate.

Fourth.—The chloride of barium precipitates a sulphate of barytes. An alkaline water ought to be mixed with acid, before adding the barytic solution to it, so as to prevent the re-action of the alkali on the barytic salt: few Swedish waters contain sulphates in considerable quantity.

Fifth.—Nitrate of silver indicates the presence of the chlorides, which precipitate it in the form of a white and thick cloud. If in the first instance the precipitate is black or brown, the presence of sulphuretted hydrogen may be concluded. Sometimes after a short interval the supernatant liquor assumes a wine-red colour, still preserving its transparency. This effect, according to the experiments of M. Hermbstaedt, is owing to the presence of an acid and volatile

body, which he supposes to be the sulphuretted or phosphuretted hydrogen: he has found it both in the water of the Baltic Sea, and in that obtained from it by distillation.

Sixth.—Oxalate of ammonia and the acid oxalate of potassa precipitate an oxalate of lime which deposits slowly.

Seventh.—The subphosphate of ammonia added to the filtered liquor shows the presence of magnesia.

Eighth.—Caustic potassa precipitates the earths and metallic oxides from their solution in acids. A white precipitate, which after some time becomes yellow, indicates the presence of iron, or else of a certain quantity of extractive matter that colours the precipitate.

Ninth.—Bicarbonate of potassa precipitates the earthy and metallic oxides, when dissolved in any other acid than the carbonic.

Tenth.—Ferro-cyanuret of potassium gives a green colour to alkaline ferruginous waters, and a greenish-blue precipitate deposits after some hours. If the water be not alkaline, or when the alkali has previously been saturated with an acid, the precipitate immediately assumes a blue colour. In the previously boiled water the ferro-cyanuret of potassium does not react when the iron has been held in solution by the carbonic acid.

The red ferro-cyanuret is still more sensible than the yellow one, because the springs contain iron in the state of protoxide, with which this last re-agent immediately forms a blue precipitate.

Eleventh.—The neutral deutochloride of gold produces a troubling in ferruginous waters, according to M. Ficinus; causing a precipitate of metallic gold, which is visible even in waters on which the prussiate of potassa and gall-nut produce no effect; but it is necessary that the free acid should be first saturated by carbonate of soda.

Twelfth.—Gallic acid, or, in lieu of this, the alcoholic infusion of nut-galls, does not at first produce any change in a ferruginous water just drawn, but after some time the water becomes gradually coloured. A clear purplish colour, which does not increase after some hours, indicates an exceedingly small quantity of iron. Our ferruginous waters generally give a very dark purple colour; and those which contain more iron assume a blackish-brown colour. Waters that contain much alkali give a dirty colour, between green and dark brown. Waters containing so little iron that its presence cannot be demonstrated by tincture of galls alone re-act sensibly, according to Mr. Philips, when a little lime water, or, what is better still, a solution of carbonate of lime in carbonated water, is added to them.

When gallic acid does not produce a purple colour in the boiled water, the protoxide of iron has been held in solution by the carbonic acid; and if the boiled water assumes, after some hours, a sea-green colour with the gallic acid, it contains some alkali.

This re-action is so delicate, that it serves to demonstrate the smallest quantities of alkali; but for that purpose it is necessary that the water should have been boiled some length of time, for otherwise the alkaline re-action may be owing to the presence of carbonate of magnesia.

A crowd of other re-agents exist, but their employment has never taught me any thing new; and those that I have enumerated have always sufficed." 85.

We are tempted to give another extract, which will no doubt be acceptable and useful to all, and more especially to such of our readers as are abroad, or who have not in their libraries all the more recent works on chemistry. The topic treated of is the detection of arsenic.

" In cases where the poison exists in the stomach in the fluid state, Valentine Rose recommends that the matter be boiled in water, containing a few grains of

caustic potassa, and then filtered; the filtered solution is again boiled, and whilst in this state nitric acid is added, so long as any precipitate appears, and until the liquor becomes clear and yellow; the boiling solution is now filtered, and nearly saturated with carbonate of potassa, care being taken to drive away all carbonic acid. Lime water is then added, which combines with the excess of nitric acid, and precipitates with the arsenious acid, as arsenite of lime, but in a very impure state; this precipitate is washed on a filter and dried, and may be reduced by boric acid and charcoal, in the tube before-mentioned.

M. Berzelius recommends that the liquor be boiled in an alkaline solution, which is to be afterwards saturated with hydrochloric acid, and filtered; this liquor may now be tested with sulphuretted hydrogen, when, if arsenic be present, a yellow precipitate of sulphuret is produced, which is to be thrown upon a small quantity of fused nitre at the bottom of a tube; an arseniate of potassa is formed, which is dissolved in a little distilled water, and decomposed by a solution of lime, which precipitates arseniate of lime; it may be well to mention, that boiling much facilitates the formation of this precipitate. The test of reduction practised by M. Berzelius is performed with charcoal only, for though boric acid, when added, causes the sublimation to be produced at a much lower temperature, yet it swells so much by heat, that it should be avoided as much as possible in delicate operations. In using hydrochloric and sulphuric acids, care should be taken that they contain no arsenic, which is sometimes the case when they are prepared with arsenical pyrites; this source of fallacy is easily avoided by testing the acid re-agents with a stream of sulphuretted hydrogen.

The processes of Berzelius and Rose are in many points objectionable, and do not equal that proposed by Dr. Christison, either in simplicity or accuracy; thus, the arseniate of lime is partly lost during the washings, being far from insoluble in water; and the arseniate, when heated with charcoal, even by the full red heat of a blow-pipe, only yields one-third of its arsenic in the metallic state. Dr. Christison's process consists in boiling the mass in distilled water for half an hour, (which he has satisfactorily proved is capable of dissolving the arsenic present, provided the matter examined be previously cut into shreds): it is then filtered and acidulated with acetic acid, which precipitates the casein, &c.; the liquor is again filtered and treated with sulphuretted hydrogen; the sulphuret is collected on a filter, and reduced with black flux, in a tube similar to that employed by Berzelius and Rose. Before treating the liquor with sulphuretted hydrogen, it is well to see if the ammoniacal nitrate of silver give its characteristic yellow colour with the solution, which effect, if produced, will indicate that it is ready for the passage of the gas, but if it do not act satisfactorily, a necessity will be indicated for the further purification of the liquor, which may be effected by simply evaporating it to dryness, and boiling the residue with distilled water, when a liquor will be procured, which may be tested with the sulphuretted hydrogen. As regards the quantity of sulphuret capable of giving satisfactory evidence of the presence of arsenic, I have produced a perfectly characteristic metallic crust from a portion of sulphuret not larger than half a grain of mustard seed; and this when freshly precipitated and dried, and therefore in a loose and uncondensed form." 117.

Mr. Rees has translated the work from the French edition with much neatness and accuracy. There is only one defect we have observed in the perusal of it, and that is, the want of an index. In a book which is intended to be a manual, and therefore one of very frequent reference, every facility should be afforded the student to find out, in a moment, the passage which he is in search of. In a second edition, Mr. Rees will no doubt attend to this suggestion.

V.

Sketches from the Case Book, to illustrate the Influence of the Mind on the Body, with the Treatment of some of the more important Brain and Nervous Disturbances which arise from this Influence. By *R. Fletcher, Esq.* Surgeon to the Gloucester General Hospital, and Consulting Surgeon to the Lunatic Asylum, near Gloucester. Octavo, pp. 391. 1833.

The favourable impression made on our minds by a former work of Mr. Fletcher, lately reviewed in this Journal, together with the attractive title of the present book, excited our attention to an early perusal of it. We cannot say that we have been without some disappointment on this occasion; nor do we coincide with the author in all his conclusions. The unconnected manner in which the subjects are treated, being little more than undigested thoughts from the note-book, is a great disadvantage. Neither can we commend the style which the author has adopted, being more calculated for a novel of the Radcliffe family, than for a medical dissertation. Of the justice of this observation we shall give ample proof in the sequel. Mr. Fletcher unequivocally addresses the general reader, and on that account "avoids, as much as possible, in these slight sketches, the use of *professional* or *scientific terms.*" We do not apprehend that the profession will thank the author for such procedure. Notwithstanding these drawbacks, there is much good reasoning and shrewd observation in these Sketches, though we think he has pushed some of his conclusions too far, and endeavoured to subvert doctrines which have been built on the solid foundation of careful observation.

The great object and aim of the author appears to be the demonstration of the influence of the mind, through the instrumentality of the brain, in deranging the bodily functions, especially those of the stomach, and producing dyspepsia, hypochondriasis, &c. Mr. F. does not absolutely deny the reaction of the dyspeptic disorders on the brain and on the mind; but it is quite clear that he wishes to make them appear very insignificant, compared with the reverse. As far as moral causes predominate over physical causes, in the production of dyspepsia, we entirely agree with Mr. Fletcher—and indeed he can prefer but few claims to originality on this point. One of the greatest philosophers of antiquity maintained that all disorders of the body originate in the mind—and one of the latest writers on dyspepsia has stated that—"the operation of *physical* causes, numerous as these are, dwindles into complete insignificance, when compared with that of anxiety or tribulation of mind." But it is on the re-action, that is to say, the influence of the body on the mind, that we are at issue with Mr. Fletcher. We maintain, from some acquaintance with the subject, that the moral shock has, comparatively, but trifling effect on the mind or temper, till the body becomes injured, and especially till the digestive organs are impaired by the operation of the moral causes. Then it is, and not till then, that we see the mental phenomena of dyspepsia displayed in all their terrors! It is Mr. Fletcher's aim to shew that the moral causes produce, through the instrumentality of the

brain, all these hypochondriacal and nervous feelings, without any necessary connexion with the digestive organs. On this part of the subject more hereafter. We objected to Mr. Fletcher's style, and we adduce the very first illustration in his work as a reason for our objection, and a sample of the composition.

ON MENTAL IRRITATION, OR THE EFFECTS OF MISERY ON THE HEALTH.

"A guest, in a noble castle, in whose halls reigns (reign) magnificence and princely hospitality, was intently observing, on a fine October morning, the various preparations for a happy day. Examples of the best and most generous blood in the kingdom, were keenly engaged in various objects of interest; some in lolling over a magnificent breakfast, and speaking rapturously of no common deeds soon to come. Others, preparing their guns, or strolling about the domain, were gazing at the fine effect of the morning sun, as its rays glistened in summer warmth among the polished ivy, which embraced the ancient turrets of the castle. These, by their pensive positions, were probably gathering up in memory, the melancholy but precious associations with days that were gone, and drawing painful conclusions on the uncertainty of human life and perishable character of all earthly grandeur. But this almost royal abode is no place for melancholy, or grave reflections.

The eye quitted the ancient pile and its reminiscences, and turned towards a more cheering view;—the glorious luminary of day, with the fresh gale of Autumn, slowly dispersing the mist from the bold and proud forms of the oak, and groups of the tall and aged fir, as they were spread in masses of majestic grandeur over the wide bosom of the park. Soon the breeze and the sun together, rolled away the morning fog from another interesting object—the unrivalled, and far-famed kennel in the distance. Taste varies. A stroller, with folded arms, leaning on the parapet, might now be seen turning his ear to this building. He is silently listening to the cheering note of the eager fox-hound, as it is borne on the gale, and soon will he be of that happy number, who in the rear of these gallant dogs, shall give the last brilliant touches of scarlet to the rich and glowing tones of the Autumnal landscape.

The guest crossed the castle court and entered the park. The morning breeze blew kindly in his face, and freshened with temporary vigour a languid and failing frame. Hitherto, even unto him, all was brilliant and full of hope; and happiness, for a day, was apparently within his reach. But what can ensure it for a moment in this world? A single thought stole cruelly into memory, and poisoned the cup already at the lip;—in an instant, pleasure and hope vanished together,—and not a vestige of the boundless beauties around him remained. The double shot 'mark,' the last whirr and note of the most beautiful tenant of the English forest, were unheard, or if heard, unnoticed; the cry of the fox-hound was mournful; a dark and gloomy mantle overspread the once bright landscape." 6.

This, it must be confessed, is a very good flourish; and might serve to open a modern sentimental novel, or the tour of a romantic girl, who had, for the first time, made a journey from Hackney to Richmond hill, with the "case-book" in hand—

"Sedate to think, and watching each event."

No clue is given us as to the cause of this "dark and gloomy mantle" which so suddenly overspread the "bright landscape," of the sufferer, unless the reader can find it in the following passage.

"It is in the calm of morning, in the first hour of wakefulness, that thought,

will have its sway; it then, to the sensitive man, becomes either destructive or soothing, yielding happiness or misery. Hence is this hour full of danger to that unhappy one, who has nothing in the past he wishes to remember, and who would willingly close his eyes upon the dreary prospects of the future. Memory however must have her victim, and imagination will assist in the work of destruction." 7.

It is consoling to find that the sensitive individual in question experienced as sudden a change to l'allegro, as he had previously done to the penseroso.

"The breakfast room, filled with the most precious remains of art, now no longer seen, to him, had all the sad and gloomy air of a sepulture; the singing of the urn, so cheering to the happy, was the hissing of the snake; the food had the bitterness of gall, and it was certainly a mere casualty whether he employed the knife intended to cut it, in more ways than one. But a soft and gentle voice struck his ear. On turning, he beheld his beloved daughter. 'Papa, I have been copying this morning for you, does it please you? offering the fruit of her morning's industry, with a deep tone of tenderness and look of affection! Man is a strange animal! In an instant the fire burnt brighter, the sun shone with unusual splendour through the ancient stained glass, the tea-kettle yielded its cheering song, the appetite returned, and for a time, at least, hope occupied the dwelling-place of misery." 9.

If this be not *transcendental* dyspepsy, we know not what it is. It constitutes the whole of the second chapter of the work. We can very well agree with our author that this is a mere fit of what he calls "mental indigestion." The functions of the stomach are disturbed for the moment, by some moral shock, and as suddenly restored by the mental sun breaking out between two clouds. Who ever doubted—who ever failed to observe these flickerings of light and shade. Cardinal Wolsey's loss of appetite by the few words from his Royal Master, is an early enough example. There can be no doubt that, in such cases the bodily disorder is from a moral cause; but when these causes are often repeated, and bodily disorder established—then comes the re-action of the body on the mind—the repayment of a large load of debt—of which our author seems to entertain much doubt. The following passage is little more than a copy from some recent writers.

"The most common rout, or channel, by which the mind through the brain affects the body, is in the direction of the stomach, where a peculiar and wide spreading malady is implanted. This may be called indigestion, or dyspepsia, but I believe it to be strictly, a nervous affection of the stomach, the nerves of which being generally the first affected,—though irritations from other quarters may be the means of exciting the phænomena of the disease, without the gastric nerves being affected, in any other than a secondary way, or as part of that system.

When these gastric nerves are affected, so as to produce the phænomena of indigestion, from an impression given by the mind, I would give the term mental indigestion to the disease. The term indigestion, however, is inadequate to express the exact nature of the affection, as frequently indigestion does not accompany the malady at all,—the appetite being often healthy and good, and the digestion complete, though when these nerves are affected, it is more slowly performed.

If we were to speak of the horrors of the nervous system, instead of the horrors of indigestion, our language would be more correct." 17.

In the fourth chapter, our author proposes to give us a picture of the corporeal symptoms of mental indigestion. Mr. F. sets out by declaring his

belief that this kind of indigestion, as well as that arising from merely physical causes, is, "an affection of the nervous system, with the difference only of being produced by different irritations." In this he is probably not far wrong, though in opposition to Dr. Philip.

"The object is, to add my mite, to what is already known (certainly too little) of the power of the mind over the body, and to shew, in some degree, that medical men would often be more usefully employed, in tracing out the wretched wanderings of a distracted mind to their source, and *in furnishing the appropriate relief, which an intellectual physician should be able to do*, than in prescribing physic and enemas only. No essential or permanent relief is ever obtained from medicine, and in no other way than by relieving the mind itself; excepting after the disease has been long standing, and the mind relieved, when the chain of functional disturbance confirmed into habits, appear to require additional aid." 30.

We confess that we do not see how the intellectual physician can now "pluck from the memory a rooted sorrow," any better than in the days of Shakespeare, when Macbeth's intellectual physician acknowledged himself quite unequal to the task!

Mr. F. admits that—

"The symptoms of mental indigestion, as seen in the body, are nearly the same as those which arise from mere stomach irritability, or an unsound condition of the lining of the stomach and intestines, or from any other physical irritant acting within the body, particularly upon the nervous system, of which the stomach may be said to form a part, and would, therefore, probably share in its general disturbance." 31.

Mr. F. also avers that "the mental and bodily symptoms (in mental indigestion) depart together, and return together, as cause and effect." To this we demur—being perfectly certain, from ample observation, that where indigestion is brought on by purely moral causes, the bodily effects will often last long after the moral causes are removed—and, moreover, that the dyspeptic symptoms will often be renewed by errors of diet, independent of any new mental cause, notwithstanding Mr. Fletcher's axiom, that the bodily symptoms "are never developed without previous mental suffering."*

In the following sketch of "mental indigestion," there is much that is true; but some symptoms that are either fanciful, or drawn from a few individual cases.

General Symptoms of Mental Indigestion.

"They are all of a nervous character, confusion, giddiness, and pain in the head, palpitation, and various uneasy feelings about the heart, the left side and left breast, and side of the neck, as if the parts were tied together, sometimes leaving a soreness of this breast. Pains oftentimes of a burning evanescent nature, on the broad parts of the back, more fixed between the shoulders,—on

* A few pages farther on, indeed, Mr. F. contradicts himself, for he says—"Sometimes the symptoms do not totally depart, by a removal from the scenes or causes of their origin. The offspring may, for a time, exist independent of its parent, and effects, continued by habit, continue long after their causes are withdrawn." 39. Again, he admits that "errors in temperance or diet will reproduce many of the mental phenomena of indigestion, to a certain extent."

sundry parts of the body, along the inside of the left arm and left leg, with some pain and oppression about the breast, flatulence, foul tongue, load at the stomach, a languor after food;—and remarkable fluctuation of the symptoms, (especially immediately after mental suffering) from strength to weakness, and from one symptom to another, the patient being comparatively well one day, and ill another. These fluctuations from health to suffering, singularly and accurately succeeding to a fit of mental anguish, altering the patient's countenance from an expression of comparative health and cheerfulness, to that of extreme illness and melancholy despair, and accompanied by excessive coldness of the body. These fluctuations worry by constant and perpetual delusions of a recovery that comes not, and help to originate a strange and peculiar kind of irritability, difficult to bear, the result of an exquisite morbid sensibility, that feels with indescribable anguish all painful subjects;—usually increased after mental anguish and irritability. Finally a melancholy gloom follows; and which, if the patient be not soothed by gentle and refined usage, will sometimes carry him far beyond the bounds of reason." 34.

Our author thinks, indeed, that this is one of the modes by which the Creator reminds man of his littleness, and stops him in the headlong career of worldly prosperity and enjoyment.

"If there are such means, such silent workings of the Deity, nervous indigestion, or what is the same thing, the effect of misery upon the stomach, and on the nervous system, is an all-powerful agent to execute this wisdom of the Creator." 35.

Despondency, Mr. F. admits to be, a feature of the physical as well as of the mental indigestion—but more exquisite in the latter than in the former species. The following passage will shew that *mental* medicine is not the only thing necessary in "mental indigestion."

"To attempt to cure such deep, wide, and various causes of misery, in the still wider range and variety of shades of character which produce and accompany it, and which make sure and woeful inroads in the mind,—by a cup of water gruel, would be expecting too much from such a remedy. There is no doubt, however, that although absence from the exciting causes and discipline of the mind, directed by a skilful hand, can only cure such a mental malady, yet, from the connexion of the brain, with the stomach, and the condition of its nerves in all such cases, the utmost care must be taken in the choice of the diet. An overloaded stomach, with a bottle of wine taken at such a season (and the patient is too apt to fly to this resource of temporary oblivion) of this extremity of human suffering in a man of naturally most exquisite feelings, would, probably, from this connexion of brain and stomach, some time on the following day, be followed by a pistol shot through his head, or the application of a razor to his throat; and I have no doubt that such has been the exact cause, and fate of many of the most ornamented of our race, whose names, the present generation remember, with a mingled feeling of admiration and mourning." 47.

Mental dyspepsy, our author observes, is sometimes combined with—and frequently merges in, "mental hypochondriasis," which he considers as only a higher grade of the former affection. We shall indulge our readers with Mr. Fletcher's sketch of—

Mental Hypochondriasis.

"The patient afflicted with mental hypochondriasis, does not go about from one medical man to another, and through the whole circle of his friends, complaining of a variety of bodily ailments, of symptoms, all of which, and each in

its turn, he described to be of a fatal character, and of which he is either satisfied, or appears to be so; but when the mental hypochondriac speaks at all of his complaint, it is with considerable reserve, for he is aware of the opinion of mankind, as it regards nervous disorders, and he disdains the appellation of being an hypochondriac;—because he is conscious that he deserves more pity and respectful compassion, than he who only regards his perishable body, and fears to die.

The mental hypochondriac will often, then, not condescend to utter a word on the nature of his sad and wretched complaints, unless it is as a matter of courtesy in reply to a question. Proud, though in desolation, he may expect the smile of incredulity, too often of derision, and he will meet it, with a bitter curl of ready contempt on his lip. The ignorant and unfeeling persons, who are silly and cruel enough to treat him as they would do (and even then it is with folly and ignorance) the inferior, less respectable companion in misery, the common hypochondriac,—he will avoid in his walks, because they disgust and weary him. He is well aware that his dire malady arises, generally, out of a redundance of the noblest though undisciplined feelings of human nature, and that his companions in the same misfortune were some of the most celebrated of men for worth and talent.

The humblest, therefore, of the entire class of mental hypochondriacs, which cannot be a large one, is too elevated to submit to derision and scorn, even (as they must always do) when these proceed from gross and unfeeling ignorance. He talks not, therefore, to the multitude. There is a delicacy and a dignity about him, and he speaks only of his grief to the select few, from whom he is sure to obtain sympathy. But mark, although to them he speaks freely, yet it is of the distresses of his mind only. And here is the distinction, between the mental sufferer whose real evils are increased by the magnifying powers of his imagination, and the ordinary hypochondriac.

The mental hypochondriac, or the unhappy man, fears not death. He too often wishes for its approach, and not unfrequently will he, especially if he is unrestrained by religious scruples, accomplish the deed with his own hands. The common hypochondriac does no such thing, but to avoid, to him, the greatest of all evils, he will take oceans of physic, and medical opinions, as long as he can find a fee to pay for them. To obtain these fees, he will impoverish himself and his family, and be clothed in rags.

The mental hypochondriac will take no physic, consult no physician, or at least is indifferent to the remedial power of medicine, for experience will teach him its inutility; but he will sometimes be seen to make immense sacrifices in business, fortune or ambition, to relieve his lacerated and jaded feelings. Of the dreadful nature and punishment of these sad ravages of misery, on the mind of man, something here may be gathered from his being seen to yield up every thing, all that mankind has ever prized, or riches can bestow, to obtain a respite from sufferings,—to remove himself, for ever, from the scenes and objects which he knows to be the source of his broken and desolate mind." 61.

It will be acknowledged that this is bordering on the transcendental pathology; though we will not say that the description is a mere creature of the imagination. Much of it is copied from nature, but we suspect that the portrait is rather that of an individual than a species.

IRRITABLE BRAIN.

This is another effect of mental suffering; but sometimes, he observes, of stomach affection.

"After some deep, acute, and sudden shock in the person, whose nervous ir-

ritability is prone to receive its entire impression, or after a long slowly lacerating, though less acute course of mental irritation, or deep anxiety,—the patient will have (in bad cases) severe shooting pains about the head, accompanied with confusion and giddiness, some intolerance of light, a feeling of soreness over the brain, or such excessive irritability of it, that a heavy footstep in the room, a jar of the door, or even a loud voice, gives great additional anguish. There is, generally, no delirium, the pulse is small and quick; the patient is not thirsty,—he has none of the symptoms called fever: his face and eyes, though sometimes possessing a wild expression, are not red or flushed, but he cannot sleep well generally, as the slightest circumstance alarms and excites him.

So far for the bodily symptoms which have periods of remission, and which are varied in force or number in different patients, probably an effect of the more or less intense mental suffering in different characters, and which suffering is the source of the phenomena. The condition of the mind is still more remarkable; its functions are unnaturally disturbed, or in morbid excess; but not generally to the extent of insanity, though often bordering upon it.

There is an extraordinary quickness of perception in the patient, an excess of sensibility and irritability, to be affected by slight mental causes, as well as by the physical ones already described.

But this mental, sensitive irritability, is vastly the most distressing, and is most intense and destructive when excited by the associations or recollections of the moral evil which originally produced the mischief.

When these restrospections act in full force, (which usually happens, if the patient has been indiscreetly left alone, with the mind unoccupied,) he will sometimes suddenly start up in mental agony, holding his head with both hands, and begging to be bled, or blistered, to relieve the dartings through his brain. The exquisite sensibility, to suffer from mental causes,—especially from those peculiar ones that produced the malady,—is carried to so great an extent, that not a word must be said, that could yield the most remote associations with these causes.

For the same reason, letters will not be read, nor even the sight of one endured, for they may, and of course sometimes do, contain the seeds for these associations, if not the fruits themselves. Nor is this all. Whoever has helped to produce the evil, and even those who without any intention, or from amiable weakness, have deceived the patient, the presence of such persons will not be endured without danger of effecting an exasperation of all the symptoms. These examples of irritable brain, possess the kind of nervous irritability, which is observed so strongly in mental indigestion. The patient likes not a knock at the door, or a heavy foot-fall. He cannot endure the idea of meeting with persons who may directly, or indirectly, from a want of refinement, excite painful feelings,—and to avoid them, he will spare no pains. Should he unfortunately encounter these luckless individuals, who unaware of the extraordinary sensitiveness of the patient, gives the pain so much dreaded by him,—the result will be, dislike to the person;—and often, will a long period elapse, before reason can master a feeling which almost amounts to hate and abhorrence.

This dislike is carried to a pitch of uncontrollable disgust towards those, who have blasted the patient's happiness;—stolen the cub from the lair, and mangled his early beauties. For it has been already remarked, that the most acute agony is that induced by the tenderest and most elevated disappointments, rather than by worldly losses." 75.

The author takes an opportunity of giving "a celebrated pathologist," a sly wipe, for averring, "that all affections of the brain, all pain in it consists either in the state of inflammation, or in a tendency to become inflamed." The depletory plan of Dr. Clutterbuck would, no doubt, aggravate the evil in these cases. There are some observations in this part of the

work which have amused us a good deal—and perhaps afforded instruction as well as amusement. Most of our readers have long been familiar with certain sounds emitted by the heart and large vessels, termed bruit de scie, bruit de soufflet, &c., though our author avers that, "even their existence appears to be almost unknown in this country." The following passage is a fine piece of satire—and, no doubt, intended merely as such.

"Almost all very severe and extensive forms of derangement of the nervous power, will affect the arteries occasionally, in a very peculiar way, which is explained in another place. This is the bellows sound. I know not who it was that first described this spasmodic affection of the arterial tubes, for spasmodic it certainly is, but Laennec has sufficiently well described it, in his book on the Diseases of the Chest. But yet, even in the metropolis of the world, *this sound was not, a year ago, at all known, or at least, certainly not generally understood, by the most distinguished of the profession.* Two of the most celebrated, admitted that they knew nothing of sounds or signs of disease or disordered actions. Some others of my esteemed friends *never heard the name of bellows sound as indicative of disordered arterial action;* and did me the honor of saying I was nervous; I had no sound in my body: but it might be in my imagination. But it certainly was in my body, and I am sorry to say, it is there still. It was admitted that they heard something; 'borborygmus,' 'bruisement,' were the words uttered, and respectfully listened to, to explain their meaning. The bellows sound is curiously evanescent, like an ignis fatuus; or rather, its floating melody pervading the body, often reminds me of the far distant, though more charming music, heard in the woods at midnight, near the Chateau Le Blanc, so beautifully described by Anne Radcliffe: which could be distinguished in the pauses of the storm, or in a calm night, and sometimes was so wayward and capricious, as to make it doubtful whether it was heard or not." 89.

Who these "most distinguished of the profession" are, must be left to the imagination of the reader. We can assure them that our good friend, Dr. Gregory, is not one of them, since we are informed that he now carries with him, in his carriage, a couple of stethoscopes (or as his footman calls them, *telescopes*) for reconnoitering diseases at a distance, and by way of *amende honorable*, for the indignities formerly offered to the "*inutile lignum.*" We are sorry that our author did not illustrate these *borborygmi* of his Worcester friends by comparisons drawn from scenes nearer home—by the sounds of the Clyde, for instance, at CORRA LINN, rather than the rushings of the Rhone, in the vales of Avignon.

Mr. F. thinks it probable that the bellows-sound of arteries depends on "a defect of the nervous power," which "admits a spasmodic stricture of the tube." This is the most whimsical idea, perhaps, that ever entered a man's head. That the sound is produced by the rush of blood through a narrowed tube—or by an unusual impulse or velocity of the blood through tubes of the natural calibre, we believe; but how that can be dependant on defect of nervous power, is beyond our comprehension. Our author says he has never known this "peculiar fugitive sound," to exist "in any other character of person than in those which are marked by exquisitely sensitive feelings." This surprises us a good deal. The following passage is in Mr. F.'s exquisite style. Under painful circumstances, intense anxiety, or the keen expectation of some strikingly interesting event—

"The sound will then issue from the body loud and distinct, clothed by novelty, and a certain degree of awe, to those who are conscious that it is an af-

fection of those vessels which circulate blood and life. But it is not an agitated mind only that can call forth these sounds; the body suddenly agitated, will produce the same effect, though certainly in an inferior degree; for the noises under such circumstances, will be more feeble, and require the quietude and stillness of morning in bed, to be distinctly heard. A sudden turn in the bed, in persons who are accustomed to the affection, will yield the bellows sound and be sure to awaken its awful and varied notes; but they will soon cease if the trunk of the body is permitted to remain at rest." 91.

We suspect that this may be an auto-pictorial representation, as it can hardly be from observation of the phenomena in others.

It is highly probable that these were the sounds that harassed the poet Cowper, and which he quaintly described when he complained that "he was hunted with spiritual sounds in the night season." The following picture can only be from the author's own feelings.

"Holding the breath as it is called, will bring out this sound, in one case, as far as can be judged, first from the arch of the aorta, whence it will proceed, with an inconceivable rapidity, to both subclavians, and often it descends into the abdominal aorta, so that the chest and abdomen appear to be occupied by a band or barrel of musical pipes. The pipes do not indeed play exactly, 'Oh, dear, what can the matter be,' but they have a certain musical melody, apart from the awful consideration of their cause, resembling chimes; but more especially do they often most exactly resemble the Æolian harp, with all its gentle cadences and intonations." 92.

But we dare not trust ourselves with any more of these rhapsodical delineations of our author, which will make the nervous and hypochondriac reader stare, but are not calculated to raise the writer in the estimation of sober-minded members of the profession. We come, therefore, to the remedial agents. As may be supposed, these are of a moral nature. To give physic to the *mind*, while labouring under indigestion, would be useless, or rather impossible, since we are unacquainted with the channels through which blue-pill and black-draught might be conveyed into the chylopoietic organs of that immaterial agent. Religion is the first remedy proposed by our author; but as this is a province into which only a very few of our *elect* choose to enter, and thus combine the duties of the Doctor and Divine —and as we have not the good-fortune to be one of the *elect*, we shall dwell but very little on this part of the treatment. The following piece of advice, however, may be appropriately offered to our *spiritual* brethren.

"To the broken down creature of sensibility, it (religion) should be given with that gentleness, charity, and forbearance, which is the true and cheering spirit of Christianity, and which will bruise no more the broken reed;—but never, to make converts to a particular faith, with the frightful denunciations of creeds, founded on its discrepancies, or on sectarian views;—an unpardonable and cruel practice, which has irreparably crushed the weakened mind of many a refined child of suffering, and sent it to glimmer out its last rays within the gloomy boundaries of a Lunatic Asylum. To these victims of misfortune, hope is ever necessary; but alarm, too often, a moral death." 117.

We are to remove existing causes of affliction or anxiety—"on the principle of closing the sources, and thence stopping the vast current of mischief, which is perpetually flowing from the memory and the imagination." If this be impracticable, Mr. F. advises us to move the patient from the scene of sufferings. This, however, is not always very practicable or convenient—

and when practicable, it is not always efficient. Memory will accompany us wherever we go, as was well expressed by the Roman poet nearly two thousand years ago.

Scandit auratos vitiosa naves
Cura! Quid terras alio calentes
Sole mutamus? Patriæ quis exul
Se quoque fugit?

Mr. F. next observes that "the curative process must be, to break those habits which weigh so heavily on the mind, and tear it piece-meal. This is best done by superseding them, by engaging the mind in such exercises and objects on which it can seize, or rather by which it is seized and retained by a superior and engrossing power." We shall here offer a page of moral medicine from the work before us.

"Already in the country, if he be a sportsman, he should be as much in the field as his strength will allow of; and if a shooter, he should be placed where the game abounds, so that no time be left for thought from the rapid succession of shots.

The patient should never be left by himself, especially in the morning, unless under some particular circumstance of being engaged in other employments, to be presently described. If, unfortunately (and which is probable), this should happen, and where he has no means at hand of writing, or otherwise engaging the mind, and his memory should be assailed or furnish painful recollections, which daunt and harass him,—he should be taught that he has no other alternative, under such circumstances, than that of fixing his attention upon some other striking thought, sentiment, or subject, whether quite agreeable or not, it matters not much, and thus wean or force his mind back from the more dangerous and original contemplation, which it thus rather eludes than overcomes.

He should make it a positive rule, which his friends should see enforced if necessary, to rise as soon as he awakes. If in the winter, a fire must always be in the bed-room; for should he awake in the night, or rise early, he must resolutely, and without hesitation, write his letters, or make memorandums. If in the summer, he should commence a long walk before breakfast, or if walking be too much, a ride—the riding should be as rapid as possible, for the very necessary act of managing a horse in quick motion, employs the mind, and snaps the chain of gloomy associations by which it is embraced. Even a trip, or a start, formerly painful, now becomes pleasing and valuable.

The morning exercises should always be accompanied by a pleasant companion, if possible, who will talk agreeably in the necessary pauses of the exercises; for in mental or nervous indigestion, it will sometimes happen, that the patient's voice is so much reduced in power, or so painful when excited, that to him, talking is out of the question. This is an effect produced upon the nerves of voice, in the same way as the impression was made upon those of the stomach, and the affection—probably a branch of the latter—is of the same weak and irritable character.

The ride, or walk, should be continued till some weariness begins to develop itself, and until some sense of hunger is felt, when breakfast should be taken, but not until the patient has entirely recovered the feeling of fatigue.

The patient, after his breakfast, must rest awhile, except from mental employment, which should be unremitting. It behoves his friends to take heed, during this period of the day, that no stray or indiscreet letter assails him, and now that he is far away from the irritations of business, pains must be taken that no subject of discourse be started that is likely to irritate, and if, unfortunately, this want of refinement and good sense be practised, the subject must be skilfully changed." 130.

Mr. F. admits that improper food "will, by its action on the gastric nerves, predispose the brain to develop the extraordinary irritability." But the practice of *composition* will often, he avers, render the improper diet of little consequence on the mental malady. Mr. F. indeed is not unfavourable to travelling exercise, and recommends three or four hours of walking or reading every day before dinner. He has seen the most beneficial effects result, "riding on the outside of a stage coach." Reading gives little or no relief to the severe forms of the malady. But COMPOSITION is the most powerful means that Mr. F. knows of, for superseding miserable feeling. He knew some who must have terminated their woes in a mad-house, had it not been for this invaluable remedy.

"There is something so prompt, decided, and even astonishing in its results, that one who has felt its beneficent influence, would be ungrateful to his Creator, forgetful of his fellow beings, and utterly wanting in human charity, were he not to make known its extraordinary power. To conceal the vast and benignant control, which composition possesses over human suffering;—the balm with which this remedy can soothe, if not heal entirely, a wound that seemed so deep, that time itself could never heal, would be criminal. It will succeed when all other methods of amusing the mind, or abstracting it from painful contemplation, have altogether failed.

To show its singular dominion over human feelings, it should be employed with energy and decision upon the most urgent occasions: for example, when the moral being, the soul of the patient, is torn by the most agonizing feelings. In one hour, nay, often in one quarter, the whole mind is occupied. The practice stealing slowly upon the enemy drives him out, and the patient is soon steeped in the depths of a soothing and delicious forgetfulness of past miseries.

The practice of the opium eater is childish to it in power, and ruinous in its result. Composition leaves no languor nor horrible unnatural remnants of a forced or excited imagination, that dislocates the mind of the opium eater, which it mangles without healing, and wrecks without restoration.

But this practice of composition directly relieves the worn and exhausted moral part of man, and not only leaves that in order and peace which it found in confusion and miserable, but gives a strength and renewed vigour to it, that both gratifies and astonishes the once despairing patient. It so wholly engrosses the powers of the understanding, as to leave no inlet or opening for the admission of painful thoughts. The mental revolution is therefore complete, the reform, radical.

There is a difficulty in sitting down to it; and this is the only one to overcome, or that stands in the way of its employment and its invaluable utility. Thus patients will aver that they cannot sit down to commence writing; but they never fail on the other hand to admit, that whenever they do so, success is sure to crown the momentary exertion of the necessary energy to begin this remedy. The better way, on the approach of the uneasy thoughts, is to sit down resolutely, and make a beginning without hesitation, or even do so in walking or riding, should ideas spontaneously spring up in the mind. For this purpose the necessary materials should always be kept in a condition for immediate use; a pocket book and pencils in the pocket, and in every living room, and in the patient's bed-room, pens and ink.

Those who have once felt the influence of this mental cordial, would forgive almost any other error in servants than the one of removing the writing materials out of the way, which only could furnish it." 153.

Here our author seems to feel an objection that may be made to this panacea—namely, that it cannot be generally applicable, inasmuch as all patients are not qualified to exercise it. He answers that those who are

affected with mental indigestion are generally people of "refined imagination," "great original sensibility," "considerable intellectual power," &c. This, we think, is begging the question. Besides, it is known to every observant practitioner, that indigestion (by whatever name it is christened) is almost as common among the middling classes of society as among the upper. It unfortunately happens too, that when people of great intellectual powers are overtaken with the malady in question, they become almost entirely incapable of composition. As few would choose to appear as author on such occasions, they must be encouraged to write books, merely as a cure for mental indigestion, and without any view of fame or fortune.

"Where authorship is out of the question, picking out portions of prose or poetry from a favourite author, and then arranging the same ideas or sentiments in the patient's own language, is a valuable substitute for regular composition." 155.

We must now take leave of our author, having given him a more patient hearing than some of our contemporaries have done. His medicinal and dietetic remarks are generally judicious; but do not exhibit any thing that is particularly new. The *composition* of the work we cannot much praise, unless it be designed to illustrate that species of *composition* which may be expected from hypochondriacal and dyspeptic patients, on first turning authors under the guidance of their physicians. The matter of the work is better than the style—and although many critics will throw the book aside as fanciful or eccentric, we know, full well, that it contains much truth, veiled—perhaps deformed, by the rhapsodical language in which it is conveyed.

VI.

OBSERVATIONS ON THE ILLUSIONS OF THE INSANE, AND ON THE MEDICO-LEGAL QUESTION OF THEIR CONFINEMENT. Translated from the French of *M. Esquirol*, Medecin en Chef de la Maison Royale de Charenton, Membre du Conseil de Salubrité, &c. &c. &c. by *William Liddell*, Member of the Royal College of Surgeons, &c. Octavo, pp. 89. Renshaw and Rush, 1833.

ESQUIROL has long been at the head of the mad-doctors of Europe, and as he had more ample means of gaining information than almost any other individual now living, his observations must always be received with great respect and attention on the subject of insanity. M. Esquirol objects to the French laws respecting lunatics, and his translator is not satisfied with those which have been enacted on this side of the Channel. Esquirol complains that the existing law has in view rather the maintenance of public order, and the preservation of the fortune of the insane, than their restoration to liberty. Mr. Liddell criticises the English law which makes great ceremony, and throws great trouble in the way of a madman's reception into a public asylum, but requires no document or return for twelve months after a person has been immured in private confinement—perhaps without being insane at all.

But leaving these medico-legal questions to the collective wisdom of our senates, we come to purely medical subjects. We shall open our analysis with the following passage.

" Insane persons fancy they see, hear, smell, taste, and touch, although external objects are not presented to their senses, and are, consequently, incapable of producing any impression upon them. This symptom is an intellectual phenomenon, totally independent of the organs of sense, and takes place although they may be inactive, or have even ceased to exist. Thus, there are deaf persons who fancy they hear, blind ones who think they see, &c. &c. The ancients had only observed this symptom, as far as it related to the remembrance of the sensations of sight, and had given it the name of *Vision*. But the analysis of the thoughts of the insane, for they do think and reason, has proved to me that this phenomenon is produced by the action of the brain, reacting upon the sensations previously received by the other senses, as well as by that of sight. This has led me to give to this phenomenon the generic name of *Hallucinations*. In the same paper in which I pointed out one of the most remarkable psychological phenomena of delirium, I related some facts which shew that the hallucinations alone, sometimes, characterize a variety of monomania." 2.

M. Esquirol makes a marked distinction between hallucinations, or visions, and illusions.

" In hallucinations, every thing passes within the brain: visionaries, and persons under the influence of extatic impressions, are hallucinarians; they dream even when they are awake. The activity of the brain is so energetic in them, that they give form and reality to the images which the memory re-produces, without the aid of the senses.

In illusions, on the contrary, the sensibility of the nervous extremities is excited, the senses are active, and actual impressions produce the reaction of the brain. This reaction being under the influence of the ideas and passions, which govern the insane, they are deceived as to the nature and cause of their actual sensations. Illusions are not uncommon in a state of health, but reason dissipates them. A square tower seen from a distance appears round, but if we approach it, the error is soon rectified. When we travel amongst mountains we often take them for clouds, but on looking attentively, the error is dissipated. To him, who is in a boat, the bank appears to move, reflection immediately destroys the illusion." 3.

Hypochondriacs, he observes, have illusions which arise from the internal senses. They deceive themselves with respect to the intensity of their feelings; but do not attribute their ailments to absurd causes, nor talk irrationally, unless affected with melancholia in addition, when there is delirium.

" Two conditions are necessary for the perception of a sensation; the soundness of the organ which receives the impression, and the soundness of the instrument that reacts upon it.

The illusions of the senses recognize, also, two causes; a disordered state of the senses, and a disordered state of the brain.

If the sensibility and activity of the organs are disturbed, it is evident that the impressions made upon the senses, by external objects, are modified; and if, at the same time, the brain is in a state of disease, it is incapable of rectifying the errors of the senses. From these causes arise illusions." 4.

The passions, which produce so many illusions among the sane, modify also the impressions of the insane, and are the cause of a thousand illusions.

From these preliminary observations, M. Esquirol proceeds to practical illustrations, several of which we shall condense.

1. The famous Térouane de Méricourt, lived ten years in the Salpétrière in a state of insanity. She used to throw two pails of water on her bed every morning and evening, and lie down in it immediately afterwards. Some of the insane have such excessive sensibility of the skin, that the slightest touch appears to them like a deadly blow.

2. An officer was seized with an intermittent in the Prussian campaign. They gave him a glass of brandy with gun-powder in it. He became immediately insane. He lay down upon straw, but fancied the straws were the beaks of birds, and kept constantly blowing on them, to drive them away. This was also an illusion of sensation.

3. A young lady became insane after the events of 1815. She had, or fancied a fixed pain in the crown of the head; and took a mortal hatred or dread of copper in every shape. She believed there was a worm in her head devouring her brain. M. Esquirol made a crucial incision on the scalp and allowed the blood to flow. A piece of the fibrine was shewn her, and she was assured that this was the worm. An issue was established on the part. In three months she was cured of all her illusions. The same kind of insanity occurred in another individual, and was cured by the same means.

4. A general officer became insane after some domestic affliction. He had severe pains in his teeth, which he attributed to the sun. When severe he raged at the great luminary, swearing he would exterminate Apollo and his chariot with his brave troops. Sometimes the pain attacked his knee and then he fancied there was a thief there.

5. A lady became hypochondriacal, and hearing the temporal arteries beat, while lying on the pillow, she fancied that her brain was liquified, and running like torrents.

Gastric and intestinal pains, flatulency, and constipation produce great illusions in the minds of the insane. M. Esquirol opened a female, who had long affirmed that she had a living animal in her stomach. She had a cancer of that organ. A woman in the Salpétrière believes that she has a whole regiment of soldiers in her belly. When the pain is violent, she roars out, and asserts that the soldiers are fighting, and wounding her with their bayonets.

We shall extract no more instances of illusions from internal sensations. We shall proceed to notice some arising from the external senses. Even in health the external senses are not infrequent sources of deception.

"The maniac hears a noise, he fancies some one speaks to him, and he answers as if questions had been addressed to him. If he hears several persons speaking, he thinks they are his friends, who are hastening to deliver him; or his subjects, who are come to raise him to the throne, and to proclaim him king.

The panaphobist, on the contrary, thinks that he is spoken to in a reproachful and menacing way; he takes an insignificant phrase for the sign of a plot raised against him; and he fancies he hears enemies, police agents, and murderers concert together to arrest and to conduct him to prison or to the scaffold. If a door opens he imagines he is lost, and is about to become the prey of those who are seeking for him." 15.

After detailing several illustrations of illusion from the sense of hearing, M. E. proceeds to those connected with the sense of sight.

"A lady, 23 years of age, afflicted with hysterical madness, used to remain constantly at the windows of her apartments during the summer. When she saw a beautiful cloud in the sky, she screamed out 'Garnerin, Garnerin, come and take me,' and repeated the same invitation until the cloud disappeared. She mistook the clouds for balloons sent up by Garnerin.

A cavalry officer imagined the clouds which he saw to be an army, led by Buonaparte, to make a descent upon England.

Insane persons often collect pebbles and fragments of glass, which they fancy precious stones, diamonds, or objects of natural history, and which they preserve with the greatest care." 18.

The sense of smell contributes to the illusions of the insane. Many persons smelling gas in the air, "fancy it unwholesome, and likely to poison them." There is something more than fancy for the first part of the illusion.

"Almost always at the commencement, and sometimes in the course, of mental diseases, the digestive functions are primarily or secondarily affected. Such patients perceive a bad taste in the food that is offered to them, which makes them conclude that it is poisoned, and they reject it with anger or with terror. This phenomenon gives rise to an aversion, on the part of the sick, to those persons who have the care of them, and which is still more marked towards those who are most dear and most devoted to them. What can be more dreadful than the fear of being poisoned by those we love?

These symptoms cease after a few days, either by diet or evacuations, when the gastric irritation is dispersed. The latter, which gives so much uneasiness to persons who are not in the habit of attending the insane, is by no means serious, and is very unlike the obstinate refusal of some monomaniacs, who will not eat, either to satisfy an absorbing idea, such as an expiation, the fear of neglecting some precept of honour or religion, or from a desire to terminate their existence.* The refusal to take nourishment, amongst the latter, should be combated by every possible means, in order to overcome a resolution which threatens their lives; whilst we should leave to themselves those patients who refuse their food because their taste and smell are perverted by the disordered state of the digestive organs." 25.

The sense of touch, so well calculated to correct the errors of other senses, sometimes deceives the insane. Several instances are related by our author, and some have been already adduced. The following are the conclusions to which M. Esquirol comes from the foregoing facts.

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* "The difficulties which are experienced, in administering food to patients of this description, can hardly be conceived by those who have not had the management of them; by the use of the stomach-pump, however, these difficulties may, in some cases, be almost entirely obviated.

Some time since I had under my care an insane patient, about 30 years of age, who had been subject to epileptic fits from his boyhood. He had occasional attacks of violence, when he would remain for several days without taking any kind of nourishment. On one occasion, after abstaining longer than usual from food, it was thought advisable to give it to him against his inclination, and for that purpose I suggested the use of the stomach-pump, which I introduced with little difficulty. He was fed in this manner for two or three days, when, finding that resistance was in vain, he consented to take his food of his own accord.—*Translator.*"

"1st. That illusions are caused by internal and external sensations.

2d. That they are the result of the sentient extremities, and of the re-action of the nervous centre.

3d. That they are as often caused by the excitement of the internal, as by that of the external senses.

4th. That they cannot be confounded with hallucinations, (visions,) since in the latter cases the brain only is excited.

5th. That illusions lead the judgment astray respecting the nature and cause of the impressions actually received, and urge the insane to acts dangerous to themselves and to others.

6th. That sex, education, profession, and habits, by modifying the reaction of the brain, modify also the character of the illusions.

7th. That illusions assume the character of the passions, and of the ideas which govern the insane.

8th. That reason dissipates the illusions of the man of sound mind, whilst it is not powerful enough to destroy those of the insane.

If by observation I have been able to elucidate a psychological phenomenon, but little appreciated, although common in delirium,—if the facts which I have related throw some light upon the still obscure history of the aberrations of the understanding, or if they furnish therapeutic views, applicable to the treatment of mental diseases, these observations will not be entirely without interest." 27.

MEDICO-LEGAL QUESTION AS TO THE CONFINEMENT OF THE INSANE.

M. Esquirol is astonished that rules are not established for pointing out the cases which demand the suspension of liberty, in the persons of the insane. We should have thought Esquirol had been long enough in practice, and in the world, to know the difficulty of laying down precise rules upon such a point as this. We are astounded, however, at the annunciation that, in France, more than 15,000 individuals are deprived of their civil and political rights, as well as of their liberty, "without legal authority." Nevertheless, M. Esquirol agrees with all the most talented physicians of Europe, that confinement is the very best means of curing insanity.

"Amongst the numerous examples of insane persons, we meet with some individuals who recover their reason as soon as they leave their home, and lose it again on their return. When restored to their usual habits, and left to themselves, they give themselves up to excesses, experience contradictions, become angry at what they see, dread the duties and customs of the world, and the bustle of business; a thousand suspicions, troubles, and opposing pre-occupations and feelings, exalt or discourage them, and delirium breaks out. I have seen at the Salpêtrière many women who could only be reasonable in the hospital, and who anxiously begged to be re-admitted, feeling, after passing some days in their family, that they were about to become ill again. Some of these patients, by returning soon enough, prevented the recurrence of the delirium; whilst others, leaving it until it was too late, were unable to escape the evil which they tried to avoid.

We have at Charenton a young man who has had many attacks of intermittent madness. Whilst he was out of the establishment these attacks were frequent; but he has now been there five years, and has not had one return of the disorder. For the last two years this patient has enjoyed all his reason; he is, however, kept within the house for fear of an attack, although, in other respects, he is quite at liberty." 36.

The reasons for confining the insane are thus summed up.

"1. For their own security, for that of their families, and for the maintenance of public order.

2. To remove them from the influence of the external causes which have produced their disorder, and may be likely to protract it.

3. To overcome their resistance to curative means.

4. To submit them to a regimen appropriate to their situation. And,

5. To make them resume their moral and intellectual habits." 71.

There are objections, however, to the rule. If the patient be furiously mad, every body sees the necessity of confinement.

"But shall we confine the insane patient, who enjoys a great portion of his reason, who has only partial delirium, and who retains almost all his moral sensibility? Will not the opposition which he is about to experience deprive him of that portion of intelligence which remains? Is it not cruel to deprive a patient of the attentions of his family, and to separate a miserable being, who is loaded with grief, from the objects of his affections? Shall we remove the panaphobist from the relations and friends whom he regards as his natural protectors, and deprive him of his liberty who is afraid of the police, prisons, chains, &c. &c.? How many more objections may not be made? Experience has answered and has proved, that the insane rarely get well in the midst of their own families, and that their cure is more rapid and more certain when they are treated away from home. We dread the contact of their companions in misfortune, lest, by imitation, the ideas and actions of those already in confinement should augment their delirium. We are afraid that patients in this state may experience the same shock which is felt by other persons, forgetting that their sensibility is perverted, and that they do not feel like persons enjoying the plenitude of health. But who will dare to assert that confinement has never been prejudicial? I frankly own that it sometimes is so; for it partakes of the nature of those things, the best of which are not always free from inconveniences. What must we then conclude! That confinement should not be abused, that we should not apply it too generally, nor too exclusively; and that it should be prescribed only by the experienced physician.

Every patient who is delirious ought not to be confined; for acute and febrile delirium often puts on the appearance of insanity. It is easy to be imposed upon in this respect; and the error is not a trifling one, for it compromises the health of the patient, and exposes the medical attendant to censure. When we are called to a patient who is delirious, we ought not to be in a hurry to give an opinion. I have attended some cases in which I have objected to confinement, although it appeared highly necessary, on account of the violence of the delirium. This precaution would be superfluous at the commencement of a second attack of madness, or of intermittent insanity, and it would be prejudicial when there is a tendency to suicide.

It does not follow that confinement should be prescribed for all insane persons; for if the delirium is partial or transitory; if it relates only to objects of indifference, and is unaccompanied with violent passion; if the patient has no aversion to his home, nor to the persons with whom he lives, and his delirium is independent of his domestic habits; if his real or imaginary causes of excitement are not to be found in the bosom of his family; if the fortune or life of the patient, or of his friends, are not compromised, and he submits to the proper means of cure; in all these cases confinement may be useful, but is not indispensable. If the patient, retaining a large proportion of his intellect, has a great attachment to his relations, it is to be feared that confinement might aggravate the disease.

Confinement is indispensable in mania, and also in monomania, when the patients are actuated by pride, love, or jealousy. Lypemaniacs, who are full of imaginary terrors, such as panaphobists, and patients with a tendency to sui-

cide, should also be confined. The latter are cunning, and crafty, and know how to defeat the most active superintendence. Confinement alone can insure the preservation of their lives; indeed it is always necessary to be on the watch for their safety.

Persons in a state of fatuity have only need of attention, and may remain with their friends unless peculiar circumstances, involving other parties, should render separation necessary; a pregnant woman, who is easily excited, would run some risk, perhaps, in living constantly with a person in a state of fatuity, although he might be very quiet. The presence of an insane person, in a family composed of several children, especially young ladies, might become a predisposing cause of mental diseases, and confinement would be therefore necessary.

Idiots have nothing to hope from confinement: if they are shut up it is only to preserve them from the accidents to which their condition exposes them; to remove them from the raillery of the ignorant, and to prevent their becoming the instruments which malefactors have sometimes made use of for criminal purposes.

The insane poor ought generally to be confined, as their relations are without the means of procuring proper attendance for them.

Whenever an insane patient, whatever may be the character of the disease, has been treated at home for a longer or a shorter period, his health requires that confinement should be tried, as one of the most powerful means of cure." 75.

With this extract, we conclude our notice of the work. With the exception of a few literal or verbal errors, the translation is a very fair one.

VII.

THE TRANSACTIONS OF THE PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION. Volume I. Octavo, pp. 412. London, 1833.

IN our last Number, we reviewed some of the papers contained in this volume. In the present Number we shall complete the notice, and put our readers in possession of the spirit or substance of such as we think adapted for our pages. The work contains twenty-one articles; some more immediately practical—some less so. On the whole, the undertaking may be regarded as highly creditable to our provincial brethren, being bold in conception, and not deficient in the execution. If we might venture to offer a hint, it would be, to compress—to present next time a less bulky volume, and to admit more sparingly papers of a general character. Writers and editors of the present day should remember that there are great demands on the time of the reading public, and that the perusal of the daily papers and weekly medical journals alone is sufficient occupation for a man of business. He cannot afford time to read essays not immediately practical and to the point; and if many such are presented in a book, he will probably throw it down with a feeling akin to disappointment or ennui. We are not defending this, we merely state what we fear is a fact, and, as caterers for the public must please the public, we leave those concerned to act as they think fit. We do not wish to sin against our own precepts, and shall, therefore, pass without further preface to the matter before us.

I. Theory of the Frontal Sinus.

[Art. III. of Transactions.]

This is an article of eight pages, from the pen of our able friend, Dr. Milligan. He deals a severe slap on the phrenologists, with whom, he says; "it is impossible to be serious, without becoming at the same time ridiculous." They may say to the Doctor with Davus—bona verba, quæso.

We shall not take up the cudgels, but proceed to the pith of the paper, which is found in the following quotation, and which cannot well be abridged without injustice to the author's notions.

"Considered in relation to the brain, the membranes, the inner table, and the diploë itself, the outer table presents no other definite organization beyond that of an irregular envelope, which is in some places as thin as a wafer, in others thicker than all the rest of the cranium. But, if we view it from without, we find that every particle of its surface is adapted to some purpose which it has to answer in combination with the soft parts with which it is in contact. Many processes are levers for the muscles; others are merely scabrous surfaces for their insertion; others are condyles for joints; others, organs of hearing; others, organs of fixation; others, of protection; and all this in direct reference to the organs in contact, but without the least relation, that can be discovered, to the encephalon. Hence we are forced to conclude that its projections solely originate under the influence, and for the completion of, functions that are all external to the cranium; and the same thing must necessarily be inferred of the external table, which is merely their substratum. These facts being established from observation, it is very easy to see how the frontal sinus, and other contemporary phenomena, take place. The evolution of the frontal sinus does not commence till the seventh year. At this time the bones of the face are still small and childish, the jaws occupied by the first set of teeth, and no acervus cerebri has yet been formed in the pineal gland. But the Wenzels inform us, from many observations, that, at this age of seven years, the brain has arrived at its full magnitude; and by inspecting their tables, copied in Milligan's Majendie, and taking the cube roots of the respective weights at seven, and the age of majority, it will be found that this averment comes very near the truth, and has only been disputed by those who did not understand how to make use of these tables. Now it is a law in the development of the system, that when any part has arrived at its full magnitude, there occurs a sensible diminution in the circulation of that part, which I have elsewhere named *stagnation*, *re-stagnation*, and *stasis*, but for which it is not easy to find a proper term. When this state occurs, less blood will necessarily pass into the internal carotid, and so much more will consequently be sent to the face and outer parts of the head by the external carotid, the other branch of that trunk from which they arise at the same instant, namely, the common carotid artery. Hence the infantile and puerile brightness of eye now gradually diminishes in splendour, because it is henceforth supplied by the waning powers of the internal carotid, while the complexion of the cheek, the volume of the face, the evolution of the teeth, the eyebrows, and the still small processes of the outer table of the skull, all sufficiently evince that the energy of the circulation has now found a new direction in the branches of the external carotid. All the parts to which this vessel carries blood, are, from henceforth, developed with nearly as much rapidity as the brain had been in the first septennial period of life. But among the bones hereby so rapidly developed, the nasal bones, the spongy portion of the ethmoidal bone, the external table of the os frontis and the ossa malæ, have their full share. But as the growth of all these bones, except the os frontis, is *forwards*, and as this bone

always maintains an exact harmonic continuity with the other bones of the transverse suture, it is necessarily brought forward along with these bones. It cannot carry the diploë along with it, which substance not being so well nourished, will tend to become absorbed. The same effect will be greatly promoted from another cause. The schneiderian membrane growing at the same time with great rapidity, advances through the infundibular passages of the ethmoid bone, is now in immediate contact with the decaying fibres of the diploë connecting the two tables of the frontal bone, which may not yet be absorbed, and passing through amongst these, whilst the pulsation of its vessels causes them to be removed, it gradually scoops out for itself a wedge-shaped cavity between the two tables, which we denominate the frontal sinus. This sinus is not completed till twenty-one, or about the time when the bones of the face are fully perfected; but that this is the mode in which it proceeds, may be determined by inspection of the sinus in skulls, at the different ages from its commencement in the seventh year, to the period of its final development. Having given many facts in confirmation of this theory of the origin of the frontal sinus, in my notes to Majendie's Physiology, editions third and fourth, I shall not enlarge more on the matter here, but conclude by observing that this view of the frontal sinuses does not seem liable to any serious objection. The eminences, therefore, and development of parts, situated over the frontal sinuses, can have no relation to, or congruence with, the parts of the brain within." 67.

We fear that this theory is not so conclusive as Dr. Milligan supposes, and that, when examined, it will prove to amount to very little. To say that the face is developed because more blood is sent to it, is merely to go back one step in the road of causation, and to assert what is almost implied or received as a matter of course. But why is the blood determined to the face? Dr. Milligan will answer—because it ceases to be determined to the brain. Why, then, and *how* does it cease to be determined to the brain? Here we arrive at a full stop, and, seeming to have acquired much by the explanation, we have really learnt no more, than that the development of parts is regulated by the sanguineous supply; but what is the efficient agent in regulating the supply, we know no more than before; and this is on the admission of Dr. Milligan's premises.

But this is only the initiative in his theory. The determination being to the face, it grows, and its bones grow. Those in immediate relation to the os frontis advancing, the outer table of the frontal bone, being attached to them, must advance also, whilst the inner table, being in relation with the brain, does not advance, and hence the vacuity between them—hence the frontal sinus. If, however, it were merely this comparatively accidental circumstance that determined the formation of the sinus, why should we have a *sinus* so constantly? Why should there not be a loose cancellous tissue? Dr. Milligan's answer by anticipation is most unsatisfactory. He says that the diploë, not being so well nourished, is therefore absorbed, and that the pulsating schneiderian membrane scoops out for itself a cavity. We fear that this explanation is tainted with that false philosophy, which made one tissue or system in the body a cause of peculiarity of disposition in other systems or tissues; the action of muscles, for instance, the cause of processes and hollows in bones. If the existence of the frontal sinuses were not constant—not productive of utility—and, consequently, not the evident result of design, we might possibly admit explanations, which have for their basis what cannot be considered but as accidental circumstances. When, however, the design is evident, as we conceive that it is in the case of the

frontal sinuses, we have no good right to withdraw this instance from connexion with the general mass. We can see no more difficulty in imagining that the Creator designed the frontal sinuses, and implanted in the organism the disposition to their formation, than that he designed the valves in the heart, and affixed to the germ the property of producing them. We know that all this is a refuge for ignorance, but its confession is better than fallacious theory.

Dr. Milligan, we know, will not be offended at our criticism, because if just, he should not be offended, and if erroneous, he can demonstrate the error.

II. Some Observations on the Peculiarities of Diseases in Infants and Children. By *J. K. Walker*, M. D. Huddersfield.

[Art. V. Trans.]

This paper occupies twenty-six pages. It is written in a discursive style, and is too deficient in method to admit of any thing approaching to an analysis. We will endeavour to select some interesting facts contained in it, and notice here and there an observation of the author's that may seem original or striking.

Dr. Walker commences by observing, that the late population returns exhibit a very considerable decrement in the rate of infant mortality within the last ten years. In some parts of the country this declension, gratifying as our author terms it, melancholy as a Malthusian would consider it, is less obvious. In some of the manufacturing districts, the number of children who have been buried, under one year old, was one-fourth of the whole number of burials in the last ten years. In one report, the number of children who have been buried, under the age of six, is more than half of the whole number. But, as the highest rate of infant mortality has usually been in large towns, so has the diminution of deaths been the greatest there.

Dr. Walker remarks that the subject of infantile diseases has only lately attracted much attention on the part of scientific men. All must agree that it deserves such.

Bad Effects from the Cure of Itch.

We notice this fact, because we have seen some like it, and because we fear that medical practitioners are too indiscriminate in prescribing sulphur ointment in cases of scabies.

"Very lately I saw a child, Mary Calverly, æt. two years, who lay in a comatose state, the pupils dilated and insensible to light; the respiration interrupted by sighs; pulse weak and irregular; bowels costive. On inquiry, I found that the child for several *months had been troubled with an eruption which the mother called the itch*, which had occupied not only the arms and thighs, but other parts of the body. The eruption not giving way to the internal exhibition of alteratives, the external application of an ointment, consisting of the *unguentum sulphuris*, with a little of the *ung. hydrar. nitrat.* added to it, was successful in producing the desired result about three weeks ago. Since that time the child's health has been on the decline, and she has complained of great pains in the bowels and loss of appetite, succeeded by frequent evening exacerbations of fever, and grinding of the teeth during sleep, &c. About ten days ago, she first

felt pain in her head, which has since been followed by stupor and convulsions. At the period my attention was drawn to the case, she had been relieved by the repeated application of leeches to the head, and the continued use of calomel, to which I added the friction of the tartar emetic ointment upon the arms and thighs, wishing to re-produce an eruption on those parts. The relief (if relief it might be called) continued but for a day or two, for the stupor increased, the pulse became weaker, and general convulsions followed, terminating in death." 79.

We have seen three or four cases of fatal muco-enteritis following the speedy cure of scabies, by the use of sulphur ointment. Indeed these cases have made such an impression on us that we do not now venture to prescribe this application without extreme attention to diet, and preparation of the patient by mild laxatives. Practitioners should be very cautious in these cases.

Effects of Diet on Milk.

Dr. W. observes that though cow's milk readily coagulates on the addition of acids, healthy human milk will not do so. No coagulation is effected by acids, alcohol, rennet, or infusion of the stomach of the fœtus, at least for some days. Nor has human milk the same tendency to run into acescency that cow's milk exhibits. This is the case, says Dr. W., with such mothers only as have generous diet, for experiments have proved that in mammalia the milk is extremely affected by this agency. Thus, if a suckling bitch is made to live for eight days on vegetable aliment alone, its milk will readily undergo spontaneous separation, and be coagulable by the ordinary means. But if the same bitch be fed solely with raw flesh, the quantity of the milk will be considerably diminished, and it will present alkalescent properties. Whether all these circumstances be strictly true we will not pretend to say, but we will take the liberty of mentioning a fact, in some degree corroborative of the latter statement. The writer of this article happened to make a considerable alteration in his diet, and took daily much animal food with porter and wine. His urine, which had previously been naturally acid, became alkaline, and he experienced great lassitude and mental and physical debility. The urine also displayed a great disposition to throw down the phosphates. He was cured, or at least very greatly relieved by taking the nitric acid, resorting to a more vegetable diet, and limiting himself to one or two glasses of wine daily. Now this is opposed to some notions on diseases of the urinary organs, that have lately attracted much consideration. It has been, and is believed, that a poor diet generally induces an alkaline condition of the urine, while a luxurious diet tends to render it acid. It is obvious that this must be received cum grano salis.

Our author occupies a good many pages to shew that scrophula prevails much in children, and attacks many organs. We see nothing new in this portion of the paper, and the manner is somewhat desultory.

Hydrocephalus is glanced at, and the connexion between the brain and the chylopoïetic viscera dwelt on. The only point we deem it necessary to advert to is contained in the following case. It is advanced as an instance of tendency to coma removed by a tonic plan of treatment.

Case. "Mary Shaw, æt. two years, an out-patient of the infirmary, who lay for many weeks in a state of coma, from which it was difficult to rouse her.

There was, at the same time, *excessive emaciation of the entire body*, produced partly by a protracted diarrhœa, and previous inadequate nutrition, so that it was considered by all who saw it, as a hopeless case; and yet this child gradually recovered by the occasional use of carbonate of soda and calomel, in powders, with the aid of chalybeate drops; and under this treatment we were able to extricate the little patient from the state of stupor which wore so menacing an aspect. The diarrhœa gradually gave way, and along with an improved state of the digestive functions, the appetite and strength increased, and nothing has since occurred to retard a complete return to health." 98.

State of the Urine in Children.

Dr. W. states justly that this has hitherto attracted little investigation. And yet the importance of the inquiry may be estimated from this fact, that in the lower classes the children suffer most from calculous diseases, and in the upper classes the elderly persons. This is thought to depend chiefly on the unwholesome diet of children in the former class.

Dr. Walker remarks, that where the diet of children is unwholesome, and the consequent disorders of their digestive organs neglected, it is common to find a deposition of red sand in the urine. This, however, will often disappear after the exhibition of alkalies, and, in some instances, the urine of a child undergoes a singular change after a continuance of alkaline remedies. It will no longer turn litmus paper red; in other cases, litmus paper (previously reddened by immersion in healthy urine) is turned blue by that under examination. He has seen soda and magnesia given for a length of time without producing any sensible effect on the urine. This secretion has not always an alkaline tendency in emaciated children. Dr. W. has only seen one case of infantile diabetes, such as has been described by Dr. Venables, although he has been on the look out for the affection. The case was that of a boy, æt. 3½ years, who, but a few months before, had slowly recovered from the measles, and was beginning to regain his strength. Without any apparent cause, his appetite failed, his stools were irregular, and the symptoms assumed the form of remittent fever. No worms were seen in his stools, and the urine was, for some time, little more than common. Nor did it appear of a chyliferous character, and the quantity not, perhaps, so excessive as is recorded by Dr. Venables. About five pints were said to have been voided in one day. Many weeks elapsed before the appetite returned, and the stools became natural. He was relieved by the use of the nitric acid, and subsequently by the sulphate of quinine. The local treatment consisted in the frequent application of spir. terebinth. to the lumbar region, and, occasionally, small blisters to the same part.

Croup and Laryngeal Spasm.

Dr. Walker approves of the division of croup into the genuine and the spasmodic. He has seen many instances of relief from the repeated exhibition of lavements charged with turpentine, after leeches had been ineffectually applied to the throat. Laryngeal affections appear to our author to be sometimes epidemic. During the various years in which measles have prevailed among the children of his neighbourhood he has frequently remarked that the fatality was very trifling during the early stage, where the

eruption was freely developed; but where that was not the case, or when there was a premature retrocession of the eruption, the respiration often assumed a croupy sound, accompanied with a dry cough. And this was sometimes the case, even when the little patient had passed favourably through an attack of the measles. The plan of treatment was varied according to circumstances; in some leeches were found necessary, in others external applications, such as the spir. terebinth. to the neck; and, where there was reason to believe the development of the rash was deficient, to the calves of the legs.

In some cases of that singular laryngeal spasm, described by Dr. Marshall Hall, little organic change was found after death. In some, there was a turgid state of the cerebral vessels and of the lungs, apparently produced by the violence of the spasm and the struggle for breath. Dr. Walker has seen several cases of this affection.

"One of the last examples of this spasmodic affection, which has fallen under my observation, occurred in an infant, whose health, in other respects did not materially suffer. The attacks of crowing inspiration returned at intervals, sometimes during the night; occasionally they were accompanied by a rigidity of the thumbs and toes, often with convulsions. At all other times the child was playful and lively. From the kind and able care of Mr. Smith, surgeon, of this town, she received considerable relief. The gums were promptly lanced, and the bowels maintained in an open state with the aid of calomel and the occasional use of glysters medicated with assafœtid. or spir. terebinth. On the supposition that, from the violence of these attacks, some cerebral affection might supervene, leeches were applied to the neck. From a steady perseverance in these remedies, no advantage was reaped beyond a temporary respite from these spasmodic shocks. They again returned, and the gums were again divided, and counter-irritation applied to the nape of the neck. At the time I was first consulted in the case, the child was slightly relieved by a tonic plan of treatment, and by the sulphas quininæ repeated in small doses. But, on reading those cases of Dr. Marshall Hall, where such striking benefits resulted from a change of air, under similar circumstances, I had no hesitation in recommending a trial of the same plan in this case, and though neither the weather, nor the season of the year, was very auspicious, yet, after a removal to Matlock, the child experienced fewer of these convulsive movements, and, in a few weeks they ceased entirely, and a rapid amendment in health and strength ensued.' 106.

Dr. Walker has often seen the same gratifying effects in the children of the poor, after removal from a damp and unwholesome abode to a dry and airy situation. Dr. W. quotes from Dr. Price's essay on Population the following facts. Before the Act of Parliament was passed, which obliged the parish officers of London and Westminster to send their infant poor to be nursed in the country, *not above one in twenty-four of the poor children received into the workhouses, lived to be a year old;* so that, out of two thousand eight hundred, (the average annual number admitted) 2690 died; whereas, since this measure was adopted, only 450, out of the whole number, died, and the greater part of those deaths occcurred during the three weeks that the children were kept in the workhouses. Dr. W. terms this highly gratifying. We are not so sure of that. Medically speaking, it is delightful enough; but, politically, we fear that the 2240 additional paupers, produced annually by the vicious and the wretched of London and Westminster, are no great gain to a country already overstocked. Dr. Walker is no Malthusian, and

benevolence prompts him to exclaim, that this extraordinary progress in the preservation of infantile life is "a rich harvest of reward." We would recommend the Doctor to peruse some of Miss Martineau's Illustrations of Political Economy; they may damp his philoprogenitive ardour.

The next paper is on the "Reciprocal Influence of the Mind and Body of Man in Health and Disease," by Dr. Malden. It is interesting, and the subject well handled; but we must pass it unnoticed, and proceed to more rigid facts.

III. Cases illustrative of Diseases of the Heart. By *Thos. Jeffreys*, M.D. Liverpool.

[Art. VII. Trans.]

This is a sort of clinical confession from a physician who has been in practice twenty-five years, and has been in the habit of taking notes of all cases of importance. Such a man has always something to say that is worth hearing. The object of the cases which he now brings forward is this. The first series are to shew what extensive organic disease may exist in the *Heart* itself, without a fatal termination; the second, what obscure diagnostics we often have, when the most formidable consequences may be expected: and the third, what powerful symptoms of heart-disease may exist which may be purely symptomatic, and consequently from which no danger may either exist, or be expected. And first of the cases of extensive organic disease. Two are related.

Case 1.—*Palpitation from Adhesion of the Pericardium.*

We may state that, as disease of the heart and great vessels is rather the disease of advanced than of early life, we are led to investigate the causes of its occasional occurrence in the latter. These are found, on a large induction, to be essentially two—acute rheumatism, and violent mental or physical exertions. Now acute rheumatism is an inflammatory affection, and consists of inflammation affecting chiefly the cellular and fibrous tissues. When it affects the heart, it usually affects these tissues still, pericarditis is consequently set up, and, as its sequence, adhesions of the pericardium are left. Thus it is that, after acute rheumatism, we have frequently adherent pericardium, and every good practitioner, remembering this, should make a point of interrogating every patient who presents himself with a cardiac complaint, as to the prior occurrence or otherwise of rheumatic attacks.

The case before us is one of considerable enlargement of the heart, and intimate adhesions between it and the pericardium, connected with acute rheumatism. We have had so many cases of this description published within these last few years, that we do not think we need notice it more in detail.

Case 2.—*Supposed Organic Disease, not fatal.*

Thos. H. æt. 40, consulted our author, in Feb. 1828, on account of an affection of the heart which had commenced five years previously. He was successively under the care of Mr. Callan, Dr. Renswick, Dr. Vandeburgh, the late Dr. Macartney, several able physicians and surgeons of Dublin, and the medical officers of one of the dispensaries of Liverpool, all of whom pro-

nounced that the disease was organic and irremediable. Bleeding, blistering, diuretics, change of air, salivation, an issue between the shoulders, and two setons were among the means employed.

At the time of his application to our author, the following was his condition.

Palpitation, easily excited, accompanied by a perceptible fulness, extending up to the left clavicle, and much pain, relieved by holding himself quite erect, and leaning to the opposite side—beating of the left side of the head—a train of dyspeptic symptoms, and great nervous irritability, aggravated, no doubt, by apprehension, and a consciousness of his precarious situation.

Dr. Jeffreys urged him not to despair. He ordered fourteen leeches to be applied between the shoulders, and a bitter infusion to be taken in the state of effervescence, with five grains of the extract of hyosciamus in each dose; a powerful stimulating liniment was ordered to be rubbed freely on the affected side night and morning. He experienced considerable relief from these means, and though he continued to suffer from palpitation and beating in the head, yet by constant employment, simple diet, and attention to his bowels, he was able to pursue his business as a shoemaker. On the 22d of March, 1830, he called upon Dr. Jeffreys, after an interval of two years. The pulse was now 80, regular—the palpitation scarcely perceptible—his looks greatly improved—his spirits good. Exertion of body or agitation of mind would still increase the palpitation, attended with the beating in the head, which was always worse in the recumbent posture.

There can be little doubt that, in this case, there was hypertrophy of the heart; but the inference to be drawn from it is practically important—not to abandon the hope of mitigating a disease, and materially relieving its symptoms, because the cause is of an organic nature.

The next case related by Dr. J. is adduced in support of his second position—that formidable and fatal disease of the heart may be accompanied by symptoms of a very obscure description.

CASE 3.—*Obscure Symptoms of Disease of the Heart—fatal Termination.*

Two cases, indeed, are related under this head. The first was that of a young gentleman who ultimately died, but no examination of the body was obtained. He had been thought, in the first instance, to labour under nervous affection only. The second case, having the demonstrative recommendation of a dissection, is more suited to our purposes.

In April, 1830, Dr. J. visited Hugh Jones, æt. 21, a cabinet maker, who laboured under orthopnœa, cough, expectoration of bloody mucus, constant palpitation of the heart, and pain of the right side of the chest. He was drowsy, easily exhausted, greatly emaciated, and his legs were œdematous. His complaint had commenced four years previously with palpitation, although he had been obliged to pursue his employment until within three weeks of his death.

Dissection. "The instant the cartilages of the sternum were divided, a profuse effusion of bloody serum, in the cavity of the chest, made its escape; and upon raising the sternum, the right lung was almost wholly covered with a thick secretion of lymph, which gave it the appearance of ulceration, and upon cutting into it, this state of the lung clearly manifested confirmed phthisis pulmonalis.

The heart, however, was the main object of our inquiry, which we found quite free within its pericardium, with rather more of the liquor pericardii than usual. The heart itself was greatly enlarged; the enlargement was found to be greatest of the right ventricle, having the auriculo-ventricular valve greatly contracted, so that, instead of the passage being of the usual size of a shilling, it would scarcely admit of the passing of a sixpence, and not even this unless passed through edge-ways, presenting the appearance of a long narrow slit, rather than that of a circular opening."

The walls of the left ventricle were thickened, and so were the cordæ tendineæ. The right lung was of a dark colour, and full of tubercles and ulcerations.

The Doctor observes that he feels convinced that this and the former case were alike, and that similar morbid changes would have been found in both. As this is mere conjecture, we need say little about it. We cannot, however, admit that the case we have just quoted is an instance of obscure disease of the heart. A tyro might have detected it. The paper is terminated by two cases of symptomatic or sympathetic affection of the heart. We will give them entire.

Cases 4 and 5. *Symptomatic Palpitation.*

"Sept. 17, 1828.—Mr. W. C. aged 17, complained much, upon the slightest exertion, of a bounding palpitation of the heart, so violent that, when the stethoscope was applied, it seemed as if the instrument was absolutely raised by the pulsations, which, however, are quite regular. This affection had existed for about a year, and succeeded a sharp attack of pneumonia. He had been attended by a most respectable general practitioner in Shropshire, who considered it a clear case of organic disease, which opinion was strengthened by that of another medical gentleman in the same county. He had also been seen by a celebrated physician there, who prescribed for him, but no very active remedial means had been resorted to. I certainly had very great doubts of its being more than a palpitation from nervous irritability, although there was not any very marked derangement of the digestive organs; but there was such an unusual anxiety for his own feelings and health, that he never left town without being amply provided with medicines and nostrums without end. I put him upon a plan of nervous tonics, internally, and tartar-emetic ointment, alternated with blisters, externally, all with only transient relief. A seton was then inserted in the side, and kept open to his great annoyance, for ten weeks, when it was allowed to heal, on account of its not being so efficacious as was wished for. His general health, however, was greatly improved, and every symptom of irritability gone off, with the exception of the palpitation, which, I believe, continued, more or less, until his mind was vigorously called into action by his going to college; although his anxious solicitude for the preservation of his health, and his minute attention to his own feelings, rendered the experiment somewhat hazardous. It succeeded, however, completely, and in the month of August, 1830, I was informed that he was considered free from complaint, and that, although he did not derive much benefit from the seton at the time, his recovery was mainly attributed to it: and I will not deny that it may have done good, as was proved, beyond all doubt, in the case of Hood, above detailed, who repeatedly assured me that, although the setons were almost more than he could bear, he believed they did him more good than any other remedy. I merely mention this to record the effects of setons, although there was no comparison in the symptoms of the two cases.

I have only a few words to add upon a case of severe Palpitation, occurring in a clergyman, of literary and sedentary habits, in this town, who was so

alarmed, either from his own apprehensions, or the prognosis of his medical advisers, that he absolutely was almost afraid of moving from place to place alone. After having gone through a long train of medical discipline, he appeared little or no better. Almost one of the last remedies tried was a seton. Being, however, at last diverted from his sedentary habits, by his election to a popular pulpit, his nervous palpitation left him. I do not know that I should have been warranted in alluding to this gentleman's case, had I not been hastily requested to see him, upon his being suddenly seized with syncope, which alarmed himself and friends so much, that they apprehended the very worst consequences. To me, however, it appeared so decidedly a palpitation from nervous irritability, that I really fear I treated it more lightly than was prudent, and certainly had not the credit of being a true prophet, although the result has fully confirmed my opinion, for he is now in good health, and free from disease, real or imaginary." 140.

This, as we have said, is the termination of the paper. We are always delighted at seeing the publication of the experience of old practitioners, and do every thing in our power to promote it. But the experience of one man is much more important and instructive than that of another. If a man in noting facts, or in relating them, is not careful to observe and to report the differences in particulars, his cases become little more than a catalogue. If for instance, we are presented with a loose description of two cases of affection of the heart, one of which turns out to be organic and fatal, and the other is functional and not fatal, we learn little more than that some diseases of the heart are more dangerous than others. Nay, if there is no good discrimination of symptoms, but a bare enumeration of those which are generic and common to each, we rather lose than gain in point of information, for we feel impelled to conclude, that it is impossible to distinguish two opposite maladies. If, on the contrary, the facts are carefully observed, the points of difference appear, and we learn, not only that the cases were dissimilar, but also the respect in which they were so. This is the kind of experience which is of value to all parties.

We have to regret that the cases of Dr. Jeffreys are open, in some degree, to the imputation of insufficiency. The particulars of difference are not adequately noted—the diagnostic symptoms are not clearly recorded. No cases of disease of the heart should be published now without a statement of the results of stethoscopic examinations.

IV. SOME OBSERVATIONS ON THE VALUE OF THE DIFFERENT SIGNS WHICH DISTINGUISH THE SAC IN STRANGULATED HERNIA; WITH SOME PRACTICAL REMARKS ON THE OPERATION, AND CASES IN ILLUSTRATION. By *J. H. James*, Surgeon to the Devon and Exeter Hospital.

[Art. VIII. Trans.]

The object of Mr. James, a surgeon well known to the profession by his work on Inflammation, is to dispel some of the difficulties not unfrequently experienced by surgeons, in distinguishing the hernial sac from the intestine during operations for hernia. Mr. James is inclined to think that this part of the subject has not received sufficient attention. Mr. James commences by observing that, in old herniæ, the number of investing layers of fascia becomes much increased, a fact often noticed and well known. The difficulty, however, is not so much with large scrotal hernia, old or recent, as with

small inguinal, and especially with femoral herniæ. Mr. J. observes that, in the latter, we have beneath the fascia superficialis, which varies much in thickness, the fascia propria, which not merely covers the sac, but completely surrounds it, is precisely of its form, has been denominated by Sir Charles Bell the false sac, and is not unfrequently mistaken for the true one. Secondly, beneath this, and externally to the sac, there is often a considerable quantity of cellular and adipose membrane, divisible frequently into layers, increasing, apparently, the number of investments. Thirdly, the sac itself is thin, often so thin as to be quite transparent, and, in many cases, is distinguishable with difficulty from the intestines. Fourthly, we may have the fascia superficialis *adhering* to the fascia propria, so that they will be divided by the same stroke of the knife, apparently reducing the number of investments divided.

Fifthly, we may, in the same manner, have the fascia propria *adhering* to the true hernial sac.

And lastly, we may have the thin hernial sac either actually adhering to the intestine, or in such close contact with it, as to be nearly, if not quite, inseparable.

Mr. James remarks, that it cannot be a matter of surprise that good surgeons have experienced extreme difficulty in this part of the operation in femoral hernia. Another source of obscurity is the hæmorrhage that sometimes occurs from small vessels. Mr. James does not mention what we have always observed to be the greatest cause of difficulty in femoral herniæ—the presence of an enlarged absorbent gland. The cellular membrane around this becomes condensed into a sort of sac, the gland itself is inflamed and reddened, and on more than one occasion we have seen it mistaken for omentum.

Mr. James passes to the distinguishing characters of intestine and sac. He thinks that they may be divided into those determinable by sight alone, and those by sight and touch conjointly. And first of the former.

Among these will present themselves the number, order, and nature of the external investments, of which nothing more need be said. Two of the indications of the *sac* are its blueish tinge and semi-transparency; the latter, however, often fails when inflammation has increased its thickness, and the former affords no distinction from hernia of the great intestine, which greatly resembles the sac in appearance. Neither indication can be relied on when there is much bleeding. Hæmorrhage, too, will obscure another reputed indication—that the sac speedily becomes dry on exposure, while the intestine does not. The polished appearance of the intestine has been much relied on; this often fails: 1st, from the great thinness of the sac; 2dly, when the contents are great intestine, which differs very little in appearance from sac; and, 3dly, where there is much bleeding. The number and circular direction of the vessels on the intestine, as contra-distinguished from their arborescent appearance and smaller number on the sac, are also mentioned; but, if the bleeding does not obscure them, still the distinction between the sac and *great intestine*, from this cause, is very difficult. In opposition to the blueness of the sac, the dark colour of the intestine has been adduced as a criterion. It is a good one. But it is liable to be obscured by bleeding—sometimes the sac is so thin as to transmit the colour of the intestine—and when the protruded part is omentum or great intestine, this criterion

will generally fail. So much, says Mr. James, for the evidence dependin on sight alone. And next of the combined indications of touch and sigh

The existence of fluid in the sac is an important particular. But ther may be little or no fluid in the sac, or none in the part which we open. I cases of adhesion, there is none of course. It is a good plan to pinch u the part before us, and so ascertain whether it is moveable on the part sub jacent. If it be so, that is of course satisfactory. But Mr. James thinks i difficult to judge, if we should pinch up the intestine, of the relative thick ness of this and the sac, especially as the latter may be thickened, or th former the thin and distended colon. Where there are adhesions, or wher the hernia is tense, and there is no fluid, this indication will prove un serviceable. Again, it is said, if you are outside the sac, you will mee with cellular adhesions, more or less strong, between it and the surroundin parts; while, if you are within, you will be able to pass the probe or th finger easily. Now this, though frequently a true criterion, is not invariabl so. On the one hand, adhesions of the intestine may prevent the finger o the probe from passing easily, although the sac *has* been opened; and o the other, it sometimes happens that the probe, or even the finger, may b freely passed outside the sac to the ring, and these are the very cases i which the fatal mistake is sometimes made, of dividing the ring witho opening the hernial sac. Mr. J. observes that, although the finger may of ten be passed outside the sac to the ring, yet the feel of the ring, especiall in femoral hernia, will differ from that which is perceived when the finger i inside the sac; it does not appear to pass so completely within its cincture arising from the attachments of the fascia propria around the ring; and again, if the ring be divided, we have not, in any case, the same decisiv sensation of being able to pass the finger into the abdominal cavity, as whe the sac has been opened.

Two other points have not, he thinks, been adverted to, as an indicatio of opening the sac. The first is the possibility of drawing down more of th intestine, which can generally be done when the sac is opened; the secon is the size of the tumour. If it be small intestine, it must, if exceeding th dimensions of an ordinary knuckle, present the appearance of a convolutio when the sac is opened; if great intestine, it must exhibit its characteristi appearance of bands.

Omentum is generally recognized by its doughy inelastic feel, before an incision is made, and by its irregular shape after the operation is commenced Before the sac is opened, its colour will frequently influence that of a thi one; afterwards its granulated feel is distinctive of it.

Mr. James concludes by offering a summary of the practical applications o the foregoing remarks. We will try to make this summary more summary still

1. The usual investments of herniæ should always be kept in mind. I should also be recollected, that it is chiefly in old herniæ that they becom more numerous and complicated. The investments are generally more re gular and more distinct in inguinal than in femoral hernia.

2. A thin sac has been commonly observed in femoral hernia. It ma be frequently expected in recent herniæ of all descriptions; but it is ofte met with in large and ancient protrusions.

3. Can we form any judgment, prior to the operation, on the existenc of adhesions? If the rupture has been reducible, and the strangulation re cent, they are not likely to be encountered; but, if the strangulation ha

been of long duration, if the inflammation be considerable, and the tumour tense, it is likely that they may exist, but that they will be recent and separable; if, however, the hernia has been an irreducible one, there is a strong presumption that they do exist, and that they are firm.

4. If the tumour is very tense and elastic, it is not only pretty certain that it contains intestine, but that this is likely to be in close approximation with the sac. While, if doughy and inelastic, especially if irregular altogether, or in part, it is commonly understood to contain omentum; or, if simply inelastic, that it contains a considerable portion of fluid. Still this fluid may not interpose at the part where we usually open the sac.

5. A large quantity of fluid in the sac may be inferred, from a diagnostic circumstance pointed out by Sir C. Bell—a portion of the tumour can evidently be returned into the abdomen gradually, without noise, and without relief to the symptoms, but it returns again as soon as the pressure is removed.

6. When there is much pain, heat, and redness of the parts, we may expect considerable bleeding, and should, consequently, consider carefully all assisting circumstances.

7. "In the *progress* of the operation, if we find ourselves baffled in our power of accurately observing the various *visible* phenomena by the bleeding, or by the complicated nature of the investments, then we shall do well to avail ourselves of those other indications which have been now mentioned, and I particularly allude to the power of pinching up a fold separate from a subjacent one, clearly felt; to the power of drawing down more intestine, or the reverse; to the power of passing the finger fairly within the ring, or, if it has been divided, into the abdominal cavity; and in any but very small herniæ, to the power of ascertaining that we have before us a convolution, if small intestine presents, or its characteristic band, if large. If we fail in these points, we have great reason to suppose that it is still hernial sac before us, not opened." 155.

8. We may conclude there is sac before us; but it may be united to the intestine, or in such close juxta-position as to endanger a wound. We must then attend to the following considerations. If the case be one of irreducible hernia, which has become strangulated, there are commonly adhesions; but omentum or fluid may be contained. The omentum may be sought for by the doughy feel, or the irregularity of the tumour at some part; this is an eligible point at which to make the opening. If there is no omentum, there is frequently fluid at the lower part of a bubonocele, and, therefore, if any difficulty is experienced in pinching up the sac, it is better to make the opening in the lower part. Lastly, when irreducible herniæ become strangulated, this accident often supervenes on a recent protrusion; if it be so, we have reason to expect adhesions remote from the ring, while they are not likely to exist near it.

Mr. James relates twelve cases in illustration of the preceding observations. We have not space for them here, nor, indeed, are they necessary for the explanation of what has been advanced. Mr. James has executed his task in a very judicious manner.

The remaining papers in the volume before us, adapted for notice, will be found in another part of this Journal.* They consist of a case of hydroce-

* Periscope Department.

phalus—of spina bifida—of aneurism of the basilar artery—and of poisoning by cantharides.

The papers which we cannot advert to, farther than by their enumeration, are these:—An Address at the first Meeting of the Association, by Dr. Hastings—on the Objects and Modes of Medical Investigation, by Dr. Barlow, of Bath—a Proposal to establish County Natural History Societies, by Dr. Conolly, of Warwick—Observations on Sleep, by Dr. Scott, of Liverpool—Report of the Out-patients of the Birmingham Infirmary—Report of the State of Disease in the City of Worcester in the year 1832, by Dr. Streeten—and a Biographical Memoir of the late Dr. Thackeray, of Bedford.

The titles of these papers will shew that, however interesting they may be, and some of them are eminently so, they are not exactly adapted for analysis in a practical journal like this. We must, therefore, leave them, with a recommendation to our readers to consult them in the original volume. The papers which we have already noticed, with the two or three which will be adverted to in our Periscope, will put our readers in possession of a great part of the contents of this provincial volume of Transactions. Though not without faults, both of omission and commission, it is highly creditable to provincial medicine, and we hail it as the harbinger of successors, yet more worthy of our intelligent profession and intellectual age.

VIII.

A TREATISE ON THE VENEREAL DISEASE AND ITS VARIETIES. By *William Wallace*, M.R.I.A. &c. Surgeon to the Jervis Street Infirmary, Dublin, and to the Infirmary established in that City for the Treatment of Cutaneous Diseases, including Venereal Diseases. Octavo, pp. 382. London, 1833.

[Second Article.]

IN our last Number, we commenced an analytical review of a work on the Venereal Disease, by Mr. Wallace, of Dublin. That notice was limited to the introductory portion of the volume, and we found occasion to join issue with Mr. Wallace on many theoretical and doctrinal points. We remarked, however, that when we arrived at the descriptive portion, we should probably find occasion to express our satisfaction at the closeness of observation and fidelity of description.

Mr. Wallace arranges the various primary symptoms, produced by the application of the venereal poison, under the heads of—1. Primary syphilis. 2. Degenerations of primary syphilis.

"Primary syphilis is characterized by uniformly exhibiting during its progress a certain series of destructive actions, accompanied, or else sooner or later followed by a corresponding series of reparative actions:—the latter series always bearing a fixed relation to the former. It will also be found, that each of these series of actions is composed of a minor series; which, in like manner, bear a regular and fixed proportion to each other.

But, on the other hand, the degenerations of primary syphilis do not exhibit any fixed relations or proportions between their destructive actions, as compared with their actions of protection and reparation, nor between the minor actions, which respectively compose each of these series; and it will be found, that in each of these degenerate forms of primary syphilis, one or more of the essential or characteristic features of the regular disease exist, in a state of monstrosity. Thus,—phlogosis, inflammation, ulceration, induration or interstitial deposition, granulation, cicatrization, &c. &c., are always exhibited in certain proportions by the regular form; but, in the degenerate forms, one or more of these actions are sometimes much increased, and at other times they are equally deficient. In short, all natural proportion is wanting, Thus the irregular forms of primary syphilis are sometimes characterized by great induration, at other times by great ulceration, and at others by the very opposite state, as exuberant granulation." 61.

This seems too mathematically precise to lead us to augur much in its favour. On this Mr. Wallace founds his classification—an ascending and a descending scale, his genuine syphilis constituting the centre of his system. All the degenerate forms of primary syphilis he refers to two divisions—those of the first being characterized principally by irregularity in the processes of ulceration or destruction, and those of the second, by irregularity in the processes of reparation.

The former division is composed of three varieties: in the first the destructive process is in excess,—phagedænic primary syphilis; in the second the same process is deficient,—superficial primary syphilis; and in the third it is wanting,—catarrhal primary syphilis.

The second division consists also of three varieties: the first is characterized by excess of interstitial deposition at the base of the ulcer,—indurated primary syphilis; the second by excess of interstitial deposition at the circumference of the ulcer,—annular primary syphilis; and third by an excess of granulation or deposition on the surface of the diseased part,—fungous primary syphilis:—

Hence there are the six following varieties of irregular primary syphilis:

1. Phagedænic primary syphilis.
2. Superficial primary syphilis.
3. Catarrhal primary syphilis.
4. Indurated primary syphilis.
5. Annular primary syphilis.
6. Fungous primary syphilis.

We cannot say much for the natural character of a classification, which makes phagedæna and gonorrhœa varieties of one division, and places in two opposite divisions the superficial and the fungous sores. The classification is, as a classification, a bad one, and no one, we are confident, can rise from the perusal of the introductory part of this volume with notions of the venereal disease in any respect clearer than, nay, with notions as clear as, when he sat down to its perusal. Nosological classifications in medicine are generally a failure. All that is wanted, is an arrangement which shall connect things in themselves similar, and enable us to study, with the least expense of time and trouble, the particular facts, and consolidated groups of facts that Nature furnishes. After all Mr. Wallace's laboured generalizations, we come at last to the investigation of the particular affections, gonorrhœa, indurated sore, phagedæna, &c.; and his speculations have only

succeeded in disturbing them from what appears their natural position, and placing them in forced and strained relations.

Before proceeding to the description of his specific form of syphilis, Mr. Wallace defines the terms which he proposes to employ. The *surface* of a sore is that which is undergoing the processes of ulceration and sloughing —the *areola* is so much of the skin surrounding an ulcer as may be diseased—the *base* is so much of the parts subjacent to or surrounding the surface of an ulcer and its areola, as may be in a diseased state—the *edge* is the line bounding the surface, or the line where the surface of the ulcer and the areola meet—the *margin of the ulcer* is that part immediately within the edge—the *margin of the areola*, or the *cutaneous margin of the ulcer*, is that part of the areola immediately surrounding the edge of the ulcer—the *rim, or border, of the ulcer* is formed by the union of the margins of the ulcer and of the areola. We cannot, for our parts, see the difference between the edge of the ulcer and the rim of the ulcer.

We have now arrived at the third chapter, in which is commenced the actual description of venereal diseases. We believe that, however we may have differed from Mr. Wallace on speculative points, we shall have the pleasure of bearing testimony to his accuracy of observation and practical acquaintance with his subject.

I. PRIMARY SYPHILIS.

Mr. Wallace, as our readers are aware, assumes that this is the genuine form of syphilis. We shall look at it as a description of a sore, independently of any theoretical considerations. Mr. W. first delineates its characters, as it shews itself on the common skin of the penis.

A. *Primary Syphilis on the Skin of the Penis.*

It most commonly occurs on the upper surface of the penis, and nearer its præputial than its pubic end, but it may be met in other situations. It is observed more frequently in the upper than in the lower ranks of society, probably from their want of cleanliness. We cannot condense the following description.

"Primary syphilis on the exterior of the penis commences by a red patch, about the size of a coriander seed, slightly deeper in colour at the centre than at the circumference. This red surface, which is of a dark hue, soon becomes a little elevated or tumid in the middle, and then exhibits somewhat the appearance of a papula on a diffused and inflamed base.

In the centre of this papula, a minute black point may be almost immediately observed, which in the course of another day is found to be a scab; and from the shining whitish-red appearance of the eminence, upon which this scab is placed, as well as from the presence of a whitish line which in general surrounds the scab, the tumidity seems to be produced by matter; yet the part does not in general exhibit a regular projecting pustular appearance, but rather an appearance as if the crust formed a covering for a cavity, which was seated much deeper in the skin than that of an ordinary pustule.

If on the following day the part be examined, the scab will probably appear depressed in its centre, and the surrounding cuticle slightly wrinkled. These changes result from the contents of the little abscess having been discharged, either by some accidental violence, which detached the edge of the scab and compressed the matter from under its surface, or in consequence of the patient

having pressed the diseased part between his fingers and thumb; for at this period his attention is often attracted to the disease by a peculiar uneasiness, which excites a feeling that it would be relieved by compressing the part in which it is seated.

If no further mechanical violence be offered, and if the disease be allowed to remain unacted upon, the scab or crust, surrounded often by a whitish line inside a diffused and tumulated areola of a brownish-red colour, is gradually increased in thickness and extent, until the ulcerative process which is going on underneath this crust has ceased; and then the crust also ceasing to extend, the whitish line at its circumference disappears. The scab gradually becomes more dark-coloured, more contracted and hard, and now seems raised on an elevated basis. But after a time it again sinks, and then often appears depressed, particularly in the centre, almost below the level of the surrounding skin. When this last change has occurred, it soon falls off, and leaves the surface, upon which it had been placed, covered by a new skin of a livid colour and thin texture.

It seldom happens that the primary syphilitic ulcer remains encrusted, until perfect cicatrization has taken place; for, from various causes, its crust is most generally detached almost as soon as formed; and although it may fall or be removed in any stage of the ulcer, I shall suppose that it has been removed while the process of ulceration is still advancing, and before any action of reparation has commenced. Underneath it we then find a sore of a dusky yellowish white colour, often mingled with minute pinkish spots. In general, its edge appears nibbled as it were, or serrated, and of a white or whitish yellow colour, sometimes very lightly punctulated, or dotted with minute brown points; and often bounded on the inside by a line of white, soft, pulpy, or lardaceous looking matter." 68.

This ulcer appears to have penetrated through the whole thickness of the skin, and its surface, which often looks flat, seems to pass under the surrounding integument, as if overlapped by it. The areola surrounding the diseased surface often becomes more injected with blood than before the removal of the crust; and if we grasp the basis upon which the ulcer and its areola are placed, we find that it is swollen or tumid. There is never, when in its natural state, much sensibility. The ulcer may increase more or less according to circumstances; but, if not interfered with, the ulceration will generally stop, and the process of reparation commence before it has attained the size of a shilling.

The approach of the restorative process is denoted by an increased tumidity and rising of the margin of the areola, and by a number of points, of a dull red colour, springing up through the yellowish white surface of the central portion of the bottom of the ulcer. The extent of the areola now diminishes, while the base becomes gradually more full, and the tumidity of the margin of the areola may increase, so as to form a swollen ring round the edge of the ulcer.

The process of granulation usually commences sooner and is more rapid in the centre of the ulcer than at the circumference, and ulceration may continue at the edge and margin, while granulations are forming in the middle. When the granulating stage is at its height, the whole seems full and tumid, and the surface, which, as well as the border, is often considerably raised above the surrounding skin, preserves, if not influenced by treatment, a whitish colour broken up more or less by reddish protruding granulations; the surrounding areola presents at this period a dingy, or livid brown colour.

The process of cicatrization is first denoted by the diseased part seeming less swollen, but chiefly as the granulations shrink, by the edge of the ulcer and corresponding part of the margin of the areola falling inwards, so as to assume the appearance of a ring at the circumference of the ulcer. The outer portion of this ring, as the process of cicatrization advances, becomes somewhat of a callous white colour, and then sends off from its inner redder edge the new cuticle. As these changes continue the ulcer shrinks, and in a few days is found to be entirely covered with cuticle. The surface of the former sore is now greatly contracted, the rounded cutaneous margin still slightly discernible, the newly-formed cuticle furfurates for a time, and the part remains for a long period somewhat livid, and the skin covering it thicker than natural. At length these appearances pass away, but the line which separates the newly-formed integument from the surrounding surface continues, for the most part, ever after accurately defined.

We bear willing testimony to the fidelity with which Mr. Wallace has described this, a not uncommon sore, and we would recommend our readers to study his description carefully. We are inclined to doubt whether, in the majority of cases, the ulcer penetrates through the whole thickness of the skin. When ulceration extends into the subcutaneous adipose or cellular tissue, the granulations are large; in this sore they are always, so far as we have seen them, small. The cicatrix too is not usually deep enough for a sore which has gone through the cutis.

If secondary symptoms are likely to follow the cicatrization, the seat of the ulcer may remain tumid or hard, and may re-ulcerate and heal more than once, before the appearance of constitutional disease; or, when secondary symptoms occur, the original seat of the primary disease will often attract attention from its becoming uneasy or painful. We may here take an opportunity of making a remark which will apply to many primary sores. When a patient applies to a surgeon on account of secondary symptoms, or when a sore has been healed with a small quantity of mercury or without any, it is always right, indeed necessary, to examine the cicatrix. If its colour is unhealthy—if now and then a scab forms upon it, is separated, and then replaced by another scab, and, above all, if much induration remains, it is à priori evidence that the poison is not eradicated, and when assisted by other circumstances, should guide the surgeon in his after-treatment.

Mr. Wallace is not confident of the period that may elapse between the application of the poison and the appearance of "primary syphilis," but he thinks that, on the whole, we may fix it as usually between the third and the seventh day, though it may be either earlier or later.

It is equally difficult to ascertain the time which would be occupied by each stage, if the disease were not interfered with or interrupted. On an average of a number of cases produced by *artificial inoculation*, the phlogosis or redness commences on the second day, the stage of ulceration occupied seven days, that of granulation ten days, and cicatrization six days, making the whole period, from the inoculation to the healing, twenty-five days. Mr. W. thinks, from the observation of ordinary cases, that the periods just mentioned may be taken as a general average, the period of the origin or the commencement of the disease alone excepted.

Having described the symptoms produced by "primary syphilis" on the

skin of the penis, Mr. Wallace proceeds to delineate the varieties which it exhibits on other parts.

B. *Primary Syphilis on the Thigh and Scrotum, and at the Orifice of the Prepuce.*

It often occurs in careless persons on the thigh or lower part of the abdomen. Its characters are similar to those already described during the stage of ulceration. But, during the actions of reparation, the base is less tumid, the cutaneous margin less elevated, and the granulating surface of the ulcer seldom rises above the level of the edge. When the disease occurs on the thigh, the cuticle, during cicatrization, not only proceeds from the cutaneous margin, but also frequently commences, without any regular law, on the surface of the granulations, which often present a remarkably tubercular, or an irregular and rounded appearance.

The rugous state of the scrotum favouring cicatrization, the cicatrix is always small, whatever the size of the sore may have been; and to this, perhaps, is owing the remarkable elevation of the surface and border, and serpentine appearance of the latter, often presented by scrotal ulcers during the granulating stage. During the ulcerative stage, the characters are precisely similar to those of the sore on the skin of the penis, save that the surface or bottom of the ulcer is more concave or cup-shaped.

At the orifice of the prepuce. It commences here earlier than on the common skin, and it often presents at its origin a well-formed pustule, with a tumid base. There is generally a plurality of ulcers; they are sometimes of a linear form, and when many such exist, they have often the appearance of radii. Even when round or circular, there are generally one or more fissures traversing their surfaces, corresponding to the folds of the orifice, and giving a chapped appearance to the part. The rim or border is very often so much raised above the surrounding skin, as to form a remarkable ring, and these ulcers are generally remarkable for the tumidity of their base. Lastly, there is a great disposition to contraction during the healing of these ulcers, and from this phymosis almost uniformly results at the period of cicatrization, if not before.

C. *Primary Syphilis on the internal Surface of the Prepuce, at the Corona Glandis and on the Frænum.*

The inner prepuce is a muco-cutaneous structure, as is the covering of the glans. The cuticle in both situations is very fine; and both parts are exposed to much excitement during connexion. Primary syphilis here resembles, in a striking manner, primary syphilis on the external surface of the penis; but there are differences which the dissimilarities of structure and situation are sufficient to account for.

The disease begins early on the inner prepuce, and the pustule is very quickly abraded, so that frequently the first thing noticed is a minute ulcer, of a greyish or yellowish white colour, not larger than a pin's head, resulting from the abrasion of the pustule. From the natural moisture in this situation, there is no scab or incrustation, and the ulcer is generally of a whiter colour than the sore on the common skin. We commonly have a plurality of ulcers here, as at the orifice of the prepuce; but, probably be-

cause they are protected, they neither extend so much, nor are so long in healing, as sores on the external surfaces.

This, however, is not the case when the ulcer occurs on the part of the inner prepuce corresponding to the corona glandis, nor when it appears in the fossa and the side of the frænum. In the former situation, the sore is generally much excavated, and often attended by much surrounding induration. In the latter, the ulcer very generally destroys the frænum, having first perforated it from one side to the other. Both often cause a more or less troublesome form of phymosis.

When uninflamed, this is not accompanied by so decided an areola as the sore on the outer integument. The areola must not be confounded with a narrowed margin, which, before and during the stage of cicatrization, here as elsewhere, surrounds the edge of the ulcer.

"Lastly, the greater thinness of the lining membrane of the prepuce, together with the limitation to the process of destruction, and the promotion of the process of restoration, which, as above stated, seem to arise from the protection of the primary syphilitic ulcer in this situation, explain satisfactorily the following additional peculiarities: 1. The absence of that serrated or nibbled margin, which frequently occurs in a very marked degree on the exterior of the prepuce. 2. The deficient excavation of almost all ulcers on the inner surface of the prepuce. 3. The lesser degree of elevation of the border and surface, during the process of reparation; for this stage is often to be known in this situation only by a gentle rising of the surface, surrounded by the narrow red margin above noticed.

It would thus appear, that when primary syphilis occurs on the internal surface of the prepuce, it generally differs from the same disease on the common skin of the penis in the following particulars,—by appearing sooner after infection; by the earlier abrasion or rupture of the incipient pustule, and the consequent formation of a minute ulcer; by the greater whiteness of the surface of the ulcer; by the absence of incrustation; by its being seldom solitary; by its smaller size; by its imperfectly formed areola; by the lesser degree of elevation of its border and surface; and by the absence of the serrated edge. It also appears, that all these peculiarities may be accounted for by peculiarity of situation and structure." 77.

D. *Primary Syphilis on the Glans, and at the Orifice of the Urethra.*

The cuticular lining of the glans is much more closely attached to it than is the cuticle of the prepuce to the subjacent parts. The primary syphilis on the glans differs from that on the inside of the prepuce in these respects;—the ulcer on the glans, while small, is in proportion to its size more excavated; but it is not in general so painful or so sensitive as on the inner surface of the prepuce; nor is there, when this disease occurs on the glans, such effusion, and consequent tumefaction, of the subjacent and surrounding parts, as when it occurs on the prepuce.

It appears to be a property of the glans, when ulcerated, not to fungate to the same extent as many other tissues. During the reparative stage of primary syphilis there are not, in general, granulations formed to fill up the cavity. This stage is for the most part solely denoted by the surface of the ulcer appearing redder, or else covered by lymph, and by an increase of the redness of the cutaneous margin, which becomes depressed or oblique towards the surface of the ulcer; while the surface of the glans itself appears, on the outside of this narrow red margin, paler than natural, or somewhat

of a pearl-colour. Probably this indisposition to granulation accounts for the depth and permanency of all cicatrices formed on the glans.

The glans is not so frequently attacked by the disease, nor that so soon after exposure to infection as the prepuce. The latter seldom escapes when the glans is affected, whereas the reverse is often the case. When an ulcer occurs at the corona or angle between the glans and prepuce, it generally makes greater progress in the direction of the prepuce than of the glans.

Primary Syphilis at the Orifice of the Urethra. This often occurs, and extends somewhat into the passage. Its general characters are the same as on the exterior of the glans. There is commonly considerable pain during the discharge of urine, and generally cicatrization is followed by a contraction of the aperture.

Cicatrization, when it has once commenced, sometimes advances rapidly, because the new cuticle may proceed at one and the same time from the lining membrane of the urethra, and from the glans at the circumference of the ulceration. When the ulcer of the orifice commences within the urethra, and from that extends over the glans, the healing process may begin in the centre, originating in the lining membrane of the urethra, before the process of ulceration has ended at the circumference,—thus giving to the ulcer an herpetic character of healing in one part, while it spreads in another.

E. *Primary Syphilis at the Edge of the Eyelid, &c.*

This may occur occasionally. It commences by a pustule having the appearance of an hordeolum. During the stage of ulceration, the lid seems as if a piece of it had been removed by a knife, and as if the wound thus caused was sharp and defined at the edge. When the granulating stage has advanced, the surface of the ulcer presents a fungous and yellowish white appearance, precisely like the same form of ulcer in the same stage on many other parts of the body; but as soon as cicatrization commences, this fungous growth shrinks; and when the part has healed, there appears a permanent loss of a portion of the eyelid.

Mr. Wallace observes that primary syphilis may appear in other parts, but it rarely does so, and the general description may suffice. Were we to trust our own experience, we should say that the sore on the lip and on the tongue was more common than that on the eye-lid, and equally, if not more deserving of special notice.

To complete the view of primary syphilis, Mr. Wallace enumerates some varieties.

F. *Varieties in the Origin, Number, Form, Size, Crusts, and Colour of the Ulcers of Primary Syphilis.*

1. Primary syphilis generally commences by a pustule on a muco-cutaneous surface or on the common skin, but more decidedly so in the latter than in the former situation, because the cuticle is firmer. Where there is no cuticle there can be no pustule, and where the cuticle has been removed by ulceration, excoriation, abrasion, wound, or laceration, a syphilitic ulcer may be formed, independently of a pustule.

2. Primary syphilis is not always solitary, because the poison applied to several parts may infect each.

" I have ascertained experimentally, that the secretion from a primary syphilitic ulcer can produce, when applied to a sound surface of the same individual, a similar ulcer; therefore we are authorized to conclude, that when a plurality of these ulcers occur at one time in the same person, they may have been caused not only by the application of the original poison, as has been already said, but also by the secretions from a syphilitic ulcer existing at the same time in another part of the same individual; and it is remarkable, that those ulcers which appear last run their course, like the vesicles of cow-pock under similar circumstances, much more rapidly than those which appear first." 82.

This is familiar to all who see much of venereal patients, independently of experiments. A sore on the inner prepuce will produce another precisely similar in every respect on the part of the glans with which it is in contact; a sore on the dorsum of the penis will produce a sore on the pubes to which the penis is opposed when supported by a handkerchief. In women nothing is more common than to witness a series of pustular sores on the edge of one labium, corresponding exactly with a similar series on the other. Mr. Wallace has not alluded to these facts. We see such daily. On the whole, it is a vulgar fallacy to suppose that the number of sores makes against their genuine syphilitic character. We have under our care at the present moment a patient who has eight or ten on the penis.

3. The figure of the sore may vary. It is true that it is generally disposed to be circular, but where these folds in the integument, as at the outer prepuce, it may be linear, or from the union of two or more sores it may assume an indefinite variety of figures. We very often see a sort of hour-glass sore on prepuce and glans at the frænum, or at the corona, from the junction of two at one edge.

4. The size may vary without much variation of character.

5. The incrustations vary. They are sometimes soft and spongy, and at other times firm and hard. They sometimes fall off quickly, and at other times adhere for a long period. Those which fall off quickly are in general of a light colour, and those which adhere for a long period are more dark. Sometimes they are thick and tuberculated, and at other times, being thin and transparent, the diseased surface may be almost discerned underneath them. This, however, seldom happens, unless when the crust has been recently detached, and the new one has not acquired much thickness. When crusts are firm and adherent, they indicate a slow disease; but when they are soft and spongy, and fall off quickly, the disease is more rapid. When crusts are very firm and adherent, they will sometimes not fall until the surface be healed underneath; and when they adhere until the granulating stage is advanced, they are often surrounded by a tumid ring at their base, owing to that elevation of the border which characterises the stage of granulation. These adherent crusts may form long and projecting scabs of a pyramidal shape, or they may be composed of flat concentric circles. Crusts being the result of desiccation of discharge, cannot of course take place when desiccation is prevented.

6. The colour, though a good general guide, is not a certain one. It is mostly a slate or ash-coloured white, a yellowish white, or a dirty white. But the colour is not always constant. We would say that it is much affected by cleanliness, dressings, treatment, or state of the patient's system, and diet. The most usual colour is certainly a yellowish white.

G. *Observations on the Diagnosis of Primary Syphilis.*

This is rather a recapitulation of preceding observations, and adds nothing we think to their clearness. There are two general remarks which we think so true as to merit attention. The first is that there is no one diagnostic mark of a syphilitic ulcer, nor any combination of symptoms decisive of the point. The only way towards arriving at correct conclusions is to weigh all the circumstances, the appearances, the history. The man of observation and experience will generally be right. The second remark is this, that minute descriptions, however prolix they may appear, are absolutely necessary, as are minute observations, in a disease like this. The routinist is a sorry animal, and Mr. Wallace's picture of him is a true one.

"Although a routine practitioner may, by long-continued experience, and after the expense of many blunders, acquire a sort of knowledge, which will enable him to judge, without knowing why, that the disease under his observation is better suited to one system of treatment than to another, he will never be able to communicate to others the principles upon which he acts; nor will he ever be able to point out to his own mind those circumstances by which his judgment is directed, and consequently he will often be in danger of falling deeply into error, before his error is discovered. In short, he may, after long experience, act in general correctly, although empirically. But, whenever we can act upon principle, empiricism is unpardonable; for although it may sometimes succeed, it is much more frequently a source of evil than of good." 89.

Treatment of Primary Syphilis.

Mr. Wallace indulges in some preliminary observations, the gist of which is that we should not treat a case of syphilis blindly, but should pay attention to the health of the patient and the state of the parts. Nothing can be more judicious. Because a patient has syphilis we are not on that account to let him become pale, emaciated, and debilitated in every way, nor, on the other hand, are we to allow the parts to become inflamed, or irritable, or indolent, and not adopt the ordinary means for such conditions. The great practical rule is this—maintain the general health, and treat the local actions on general principles. The means of doing so must be left to the discretion and the experience of the individual practitioner, as no general rule can be given. We would simply make this remark—the patient should not live low, and if he has been accustomed to any particular stimulus, either that or an adequate substitute should be allowed him.

A. *Treatment of Primary Syphilis during the first and second Stages.*

Our readers will remember that these are the stages of destruction, the third and fourth being those of granulation and cicatrization, or of repair. The disease is seldom seen in its very first stage, or that previous to ulceration. Mr. Wallace recommends that, if seen, the part should be cut out, but the patient should still be treated constitutionally, as if the disease had been more advanced. We confess that we doubt the propriety of this advice. Either the excision is effectual or it is not. If it is, we require no constitutional treatment; if it is not, why resort to it? The character of the sore, when it forms, and its progress, are of great assistance to the surgeon, in enabling him to judge of the propriety of his constitutional treatment. If we excise the part we lose this index without any equivalent advantage.

Patients generally apply in the stage of ulceration. In that stage Mr. W. immediately applies the nitrate of silver in such a manner as to destroy the diseased surface. In a healthy person this, he says, will stop the process of ulceration, and by preventing the necessity for granulation, lead directly to cicatrization. But if the process of reparation is already commenced " nothing can be gained, but much injury may be done by an escharotic application, for at that period all the actions are tending to cicatrization and the destruction of the newly-formed granulations must have the effect of retarding this process." Now this is a point of practice, a matter of fact, in which we feel compelled to differ, toto cœlo, from Mr. Wallace. We are not satisfied of the truth of either of his positions. We may mention a case in reference to the first. A patient had two sores decidedly syphilitic on the body of the penis. They were in the stage of ulceration. We dressed one with the black-wash and treated the other with caustic, the patient taking at this time the blue-pill. They both improved pari passu, the one touched with caustic rather lagging behind its fellow, than out-stripping it. We have seen much inflammation and very troublesome consequences from the application of caustic in this stage. On the other hand we have no hesitation whatever in saying that caustic in our hands has expedited, or most unequivocally appeared to expedite the healing of the sore, when applied in the stage of granulation. We might bring forward many cases in proof of this assertion, did our limits permit us to indulge much in critical observations. But we may remark that analogy is altogether against Mr. Wallace. We would ask if the nitrate of silver is found to retard the cure of ordinary ulcers in the stages of granulation and cicatrization? Any hospital dresser would reply in the negative.

On the whole, then, we have arrived at a conclusion opposed to that of Mr. Wallace. In the stage of ulceration we would rather use simple applications, as the black-wash, and see the local effect of our constitutional treatment, whilst in that of granulation we would employ the nitrate of silver. And this is not so much from theory as from the result of the cases we have witnessed and have treated.

The following remarks on the ulceration of or near the frænum, perfectly agree with our own experience, and are highly deserving of attention. We have found the nitrate of silver in these cases quite as effectual as Mr. Wallace reports it. In one case we tried the compound tincture of benzoin, but it failed.

" In treating primary syphilis situated near or on the frænum of the prepuce, I have, on many occasions, demonstrated to the pupils at the hospital the remarkable influence of the nitrate of silver in stopping the ulcerative process of this disease. The tendency which chancre has, when it occurs in the fossa between the corona glandis and the frænum, to perforate this fold is notorious; and so universal is the belief, that when it has been perforated, the ulcer cannot be healed until the whole of this membrane be destroyed, that it is laid down in books as a rule of practice, to divide the remainder of it with a bistoury, as soon as the perforation is observed. Now I affirm that, in nineteen cases out of twenty, if the patient applies before the ulcer has perforated the frænum, its perforation may be prevented, by employing the caustic in the manner here recommended; and I still further affirm, that if he has not applied until after its perforation, we may, if we think it right, still save the remaining portion, by cauterizing with the nitrate of silver the sides of the opening. If the hole be suffi-

ciently large, the caustic should be run through the perforation, so as destroy completely the diseased surface. In this manner I have, on some occasions, but simply with the view of demonstrating the power of the caustic, saved the residue of the frænum, when it was scarcely thicker than a hog's bristle, and separated from the penis by a hole sufficiently large to allow a pea to pass. A delicate string of this kind is, however, in general ruptured by the first erection; but, at other times, the hole in the frænum has been so minute, that a hair only could be passed through it, and then this membrane continued to be as useful as before the perforation; which perforation however never filled up." 96.

Our author gives many minute directions on the manner of applying the caustic. For these we must refer to the work itself. One passage, however, we will quote, because it contains what approaches to gasconade.

"The fear of inflammation is totally groundless; the dread of bubo, we shall hereafter see, is if possible still more groundless; and the inconvenience presumed to arise from the want of a criterion to regulate the constitutional treatment after the healing of the ulcer, is a phantom of the imagination, suited only to amuse the patient, and to reconcile him to a system of practice most unnecessarily cruel, because most unnecessarily tedious,—in fact, we have many more satisfactory guides to regulate our course." 99.

We do not hesitate to say that there is here a great deal of exaggeration. The student would suppose that "the unnecessarily cruel" treatment of sore, that is the non-application of caustic in the early stage, must lead to a very tedious affair. We most positively assert our conviction that, under judicious management, this is not the case; that sores well treated, locally and constitutionally, heal without caustic in the ulcerative stage, as well as, or better than, with it, and that the cruelty and the tediousness are phantoms of the imagination of the ingenious author. We also venture to contend in the face of Mr. Wallace's somewhat positive denunciation, that the disposition to healing of the sore under simple applications and general treatment, *is* a criterion of some importance, and one that a good practical surgeon is always well pleased to have. In conclusion, we would hint that Mr. Wallace himself is somewhat too caustic in his remarks as well as in his treatment. It is hardly decent to accuse all who do not use caustic as freely as himself, of "founding their opposition on prejudice or timidity, both of which generally spring from ignorance." This is unhandsome. We suppose we must be content to be considered prejudiced, timid, or ignorant, for we cannot agree with Mr. W. in his unbounded love of caustic. As Boswell says, what will fill a pint pot won't fill a quart—the evidence against caustic has filled us, but not Mr. Wallace—and we must therefore be looked on as the pint pot.

B. *Treatment of Primary Syphilis during the Third and Fourth Stages.*

We now arrive at the consideration of the mercurial treatment, a consideration as vast and as important as any in the circle of medicine. Mr. Wallace observes very justly that the world is divided between two opposite errors—one, that mercury is indispensable for the venereal disease—the other, that it is not required for it. Men are see-sawing between these notions, and the practice at the present moment is a strange jumble of their discordant elements. We subjoin the following remarks, as very exactly descriptive of the present indecision.

"No doubt very great mischief has resulted in the practice of routine or unreflecting practitioners, from the long-formed and deeply-rooted opinion, that mercury was an unerring specific against every form of venereal disease. For this opinion led to the supposition, that, whatever effects the venereal poison produced, these effects were controllable by the action of the specific; the modifying or opposing influence of collateral circumstances was not taken into account; and to remove the effects of the poison, it was deemed necessary only to proportion the quantity of the remedy to the obstinacy of the disease.

It would also seem that the belief in the all-powerful influence of mercury over the progress of venereal diseases had naturally led to the conclusion, that these diseases could not be controlled, unless by the influence of this remedy. From these conjoined opinions—the belief in the paramount efficacy of mercury, and the belief that this remedy was indispensable—the most direful consequences resulted: consequences vastly more destructive than those produced by the uncontrolled influence of the venereal poison.

Although it seems to have been known to many of our predecessors that the foregoing opinions were erroneous, their writings on the subject did not obtain that attention which they so highly deserved; and it was left to the researches made in our own times to demonstrate, beyond doubt, that mercury does not control, under all circumstances, those states which are produced by the venereal poison; and that the effects of this poison are not necessarily progressive unless controlled by mercury. These important discoverics—and important discoveries they may well be called—must, if used with discretion, contribute in a remarkable degree to an improved mode of treating the venereal disease; and in the future parts of this work, their value will appear in full light. But on this occasion, as on almost all others, we run from one extreme to another; and the erroneous opinion that mercury necessarily controlled the effects of the syphilitic poison, and that the diseases produced by the influence of this poison were necessarily progressive unless controlled by mercury, has been in many cases superseded by the equally incorrect opinion, that this medicine does not exercise any specific influence over venereal diseases; and that in their treatment more injury than advantage always results from its action." 104.

The great error is, that men have expected too much from mercury on the one hand, and, upon the other, that they have not investigated its peculiar effects, and the manner in which it may modify venereal symptoms.

Let us now look a little more narrowly at the arguments used by the mercurialists and the non-mercurialists.

The chief objections urged against the use of mercury by the non-mercurialists are three;—1, that mercury is not a specific, some forms of the disease resisting it; 2, that the venereal disease is curable without mercury, and that as easily as with it; 3, that mercury is often productive of effects as injurious as the disease for which it is given. Two of the arguments, in short, are directed against the use of mercury, one against its abuse. Let us look at them seriatim.

And first, that mercury is not a specific. It appears to us that very erroneous ideas are entertained on this head. There is no such thing as a specific, in the extreme sense of the word. Bark will not always cure ague, brimstone will not always cure itch. But in the great majority of cases these remedies, properly timed and judiciously employed, will cure the diseases to which we have alluded, and there are no other remedies so effectual nor so certain. We maintain that mercury has as good a title to be considered a specific in syphilis as cinchona in intermittent fever, or sulphur in scabies. We need not say that, if this be true, it cannot be a valueless remedy.

The second argument employed by the non-mercurialists is, the curability of syphilis without mercury. This is certainly an important one, and if founded on general experience it would prove a conclusive one. But is it founded on general experience? We will first introduce Mr. Wallace's opinions and reasoning on this subject.

"It is affirmed, that primary venereal diseases of every form or kind may be cured without mercury. Now, although I am not prepared to go so far as to admit the possibility of curing primary syphilis on every occasion without mercury, I am prepared to say that a vast number of cases of this disease may be so cured. But does this, or even the universal curability of syphilis without mercury, form a positive objection to mercurial treatment? This question cannot be answered without first determining, whether more advantage may be obtained from this, than from any other mode of treatment; and secondly, whether any positive or counterbalancing injury results from the proper employment of mercury in the treatment of primary syphilis; for we must not argue against an appropriate use of a remedy by adducing consequences which may arise from its improper or injudicious administration.

In answer to the first question I reply, that it must be admitted, even by the opponents to mercurial treatment, that in a large number of cases of primary sores, the length of time required for their cure is greatly diminished by the employment of mercury, and also that this medicine has very considerable influence in preventing secondary symptoms or contamination of the system; while in answer to the second question, I must content myself for the present with affirming, that I have never observed any injury whatever to result to the constitution of the patient, from that employment of mercury in the treatment of primary syphilis, which the reader will find recommended in the future pages of this work.

Now when syphilis can be cured more rapidly with mercury than without it, and when no inconvenience can result from a properly directed administration of this medicine, have we not the same reasons for using it in primary syphilis, as we have for using any other remedy in any other disease? We do not in general employ medicines, because of a conviction that the diseases for which they are employed would be incurable without them, but because we know from experience that the cure of disease is often rendered more rapid by a judicious interference of art. Precisely the same principles should guide us in the treatment of primary syphilis.

Suppose that a patient, possessed of ordinary powers of forming a correct judgment, applied to a surgeon, on account of primary syphilis, and that the surgeon candidly assured him, that, although the disease under which he laboured might be cured without mercury, yet that its cure would most probably be hastened by the employment of this medicine; and suppose that the surgeon further informed him, that great mischief might result from the improper or incautious use of mercury, and then left the patient at liberty to decide which mode of treatment he would prefer; I can, from experience, say, that he would indubitably prefer the treatment by mercury.

Let it be admitted that secondary symptoms will not occur oftener, on an average, than in one case out of twenty, or in five in the hundred, which have been left entirely to Nature: this being the lowest average which has been made on this subject;—and let it be further admitted, that of these five cases, which would be followed by secondary symptoms if left to Nature, no more than one would be followed by such symptoms if the primary were treated judiciously by other means than mercury: this would leave on the whole only one case in the hundred to be followed by secondary symptoms, when mercury was not employed. Now put the question to the patient in even this extreme way, or let

him be told that there is only one chance out of the hundred that secondary symptoms will occur, although he may not use mercury, but that the chance would be diminished if mercury were employed; and I have no doubt, that, under almost all circumstances, this treatment would be preferred by him; but particularly so if he be informed of the fact, that the same treatment, which will be most likely to prevent secondary symptoms, will also promote the cure of the primary, and that the same care or caution in his mode of living, which is in general necessary for the cure of the primary sores without mercury, will be all that is necessary in conducting an appropriate mercurial course.

On the whole, while I admit the important results, which have sprung from modern inquiries respecting the venereal disease and the action of mercury, and feel sincerely grateful for the addition thereby made to our knowledge, and particularly as to the determination of the question of the general curability of venereal diseases without mercury, I must express my conviction, that much mischief has arisen from the general cry raised against this medicine, and from the vacillating and unsteady practice, to which this injudicious clamour has led. These modern prejudices are now however ceasing—not gradually but rapidly; and I have no doubt that ere long a middle course of practice will be universally adopted; and that the evils of the old mercurial, and of the more modern anti-mercurial practice will be equally avoided, and a rational system of treating the venereal disease adopted in their place,—founded upon a knowledge of the facts, that mercury, if properly administered, is in a great number of cases highly efficacious in controlling the venereal disease, or that form of morbid action, which is produced by the influence of the venereal poison; that this disease may however be in general cured, if necessary, without mercury;—and that, on some rare occasion, this remedy, in place of curing syphilis will aggravate all its symptoms. In short, with these facts, which have been satisfactorily ascertained by modern researches, and which are now placed before our eyes, we shall no longer be in danger of employing mercury, when more mischief than good may result from its employment; nor of persevering in its use, when it can no longer serve any good purpose, but may produce the most injurious consequences. We have however much still to learn; and it is the duty of every practitioner, who possesses opportunities, to take advantage of them, and endeavour to arrive at fixed rules of conduct in respect to many points as yet unsettled." 109.

The chief facts on which the argument against the necessity for mercury has been founded, are those contained in the Army Medical Reports. They are certainly staggering, and we must confess that, taken *per se*, they would naturally exercise a powerful influence on the mind of any candid enquirer. But even in these reports there are considerable discrepancies—the non-mercurial practice appearing more successful in some instances than in others; and when we consider the perfect control which can be exercised over soldiers in hospital, and the regularity in diet and in discipline which can be enforced, we might suppose that the results of any experiment would be most certain and most satisfactory in their persons.

The facts elicited by the army surgeons have made a great impression on the minds of all professional men, and few, if any, have refrained from making experiments on the treatment of sores without mercury. We believe that, if the majority of those connected with institutions where venereal patients are collected, were required to state the results of their experience, it would be in favour of mercury. We venture to say that there is not a surgeon in extensive practice in London who has not abandoned, if he has tried, the non-mercurial treatment. Questions of this sort are generally best de-

termined by the common experience of mankind, and we entertain no doubt whatever that this is on the side of mercury.

It would be difficult to bring forward numerical statements in opposition to those in the army reports, and any such attempt would be out of place here. But we may state broadly, that all that we have seen is opposed to the tenor of those reports. We do not say that syphilis cannot be cured without mercury, but we do say that all we have seen has compelled us to this conclusion, that syphilis is cured more speedily, more easily, and more effectually with it than without it. We have under our care, at the present moment, four cases of relapse after the non-exhibition, or the inefficient exhibition of mercury. One patient had sloughing sore on the penis, and sloughy throat. He was cured by sarsaparilla and general tonics. He has lately returned to us with extensive ulceration of the throat and pharynx, an interval of some months having elapsed between the first and the secondary affection. The second patient had also a foul sore on the penis, and sloughing ulceration of the throat, which were cured by sarsaparilla, &c. He returned with broken health, sallow complexion, pains in the limbs, and ulceration in the throat. The third patient had a sloughy sore on the penis, which was cured by tonics, and a very small quantity of mercury, continued only for a week or ten days. He has returned with pains in the limbs, emaciation, sallowness, and all the precursory symptoms of some secondary affection, sore throat, or eruption. The fourth patient had the tubercular eruption. He was treated inefficiently by the oxymuriate, under which the eruption nearly passed away. He has returned emaciated, and covered with clustered tubercles, the former having been insulated. He is rapidly improving under the use of the mercurial ointment.

We have said that it would be difficult, and out of place in a review, to meet the argument we are now considering by specific details. We have merely adduced the preceding cases as happening to be under our observation at the present moment, and we put it to any practical man, whether such occurring frequently cannot fail to make a great impression on such as see them. On the one hand the experienced surgeon reads documents calculated in an eminent degree to shake his belief in the necessity for mercury; on the other, his daily observation serves to confirm it. What is he to do? That happens which might, à priori, be supposed to happen. The surgeon with little experience is confounded and dismayed, and flounders on either blindly giving or blindly withholding mercury. The man of greater opportunities disregards what he reads for what he sees, and forms for himself a practical code of treatment, a code into which we feel certain that mercury enters pretty largely. Such we believe to be the state of the case at the present moment. Experienced surgeons are, upon the whole, moderate mercurialists; surgeons with little experience either do not use mercury at all, or abuse it. This is a condition which is far from satisfactory, and it is on this account that we wish to bring the subject of the venereal disease and its treatment prominently and frequently before our readers.

The third argument against mercury hinges on its abuse. To this we need only reply, that if a powerful remedy be abused, the best method of correcting that abuse is not to interdict its use.

After all, the practical conclusion to which we must come is this—that surgeons should carefully observe the character and watch the progress of

venereal sores and symptoms, that they should also carefully mark the effects of mercury, and, having done this, they will be best able to determine the conditions that are benefitted by mercury and those that are aggravated by it; when mercury should be given and when it should be withheld.

We return to our analysis.

Mr. Wallace properly observes, that the precise mode in which mercury acts is a mystery which passes our powers of observation. It is one of those ultimate facts which always baffle inquiry. The legitimate subjects of observation and investigation are the phenomena displayed during its employment. Mr. Wallace seems to consider mercury a stimulant. What his precise notion of a stimulant may be we cannot say, but certainly mercury is no stimulant in the sense in which alcohol or bark are stimulants. If an individual take wine, an acknowledged stimulant, for a certain length of time, he will under ordinary circumstances become more robust, more plethoric, more liable to the diseases of repletion than before. Just the contrary is the case in respect to mercury. The individual who takes it becomes pale, emaciated, irritable, weak, and if a certain limit be passed, he dies of a disease the very reverse of repletion. Nay, we assert most positively that, stimulants are the antidotes to mercury—that a patient going through a course of mercury should live comparatively well, that if accustomed to porter or wine he should have porter or wine, in short, that to prevent the injurious consequences of mercury he should be *stimulated*. Do we find that the effects of opium are diminished by another narcotic—that the debilitating consequences of one medicine are diminished by another which debilitates also? We apprehend not, and we are convinced that if there is one fallacy more gross and more pernicious than another, it is that of considering mercury a stimulant. It is an abuse of terms, an egregious scholastic delusion, that we know not how to condemn sufficiently. We say to the profession, do not think mercury a stimulant, but be content to watch its effects in health, its power of controlling action, and the kind of action that it controls in disease, and then be guided by an acquaintance with those effects, in exhibiting or refraining from it. It is the insane desire of writers on the Materia Medica to nosologize, that has led them to put medicines in rank and file, when the fact is, that the same medicine under different conditions of the recipient has different or opposite effects, and no two which are placed together have really a common action.

Mr. Wallace observes that great mischief frequently results from the topical application of mercury, or other stimulants, during the stage of ulceration or destruction, the most appalling cases which he has witnessed having been caused by the injudicious application of the red precipitate, or other irritating substances. This agrees in a great measure with what we have seen, but we may be permitted to remark, that it does not agree with Mr. Wallace's strenuous recommendation of caustic in the early stage of sore. We have seen the black wash ("a topical application of mercury") agree well with the sore throughout, and really we feel no objection to using it throughout. But the application of caustic in the early stage has, in our observation, been followed, in one or two instances, by those very injurious effects that Mr. Wallace attributes to stimulating or irritating applications. We put it to any person whether nitrate of silver is not a greater stimulant or irritant than the black-wash? We think Mr. Wallace rather biassed by

his theory on the destructive and reparative stages, in condemning the application of all stimulants prior to reparation. The great rule on which we should insist, is not the observation of the slight barrier between these stages, but of the presence or absence of inflammation. If the sore is angry or inflamed, it is better to employ poultices or tepid emollient applications until the inflammatory action has subsided. But this is merely an application of the general principles of treatment of sores, venereal and not venereal.

Mr. Wallace also condemns the internal exhibition of mercury during the ulcerative stage. Here, again, we feel a difficulty in agreeing or differing with him. It appears to us, that it is not the ulcerative stage, per se, that forbids the exhibition of mercury, but a state of system unfavourable to its employment. If a patient applies with an anxious or unhealthy appearance, a white or loaded tongue, a frequent pulse, a warm skin, and, as usually happens under these circumstances, an inflamed appearance of the sore, the employment of mercury would be most injudicious, and would probably give rise to sloughing or to phagedæna. If, on the contrary, the patient appears with all the symptoms of debility, emaciated, pallid, with a feeble pulse, the exhibition of mercury would be equally improper. It may be said, as Mr. Wallace seems to say, that mercury is pernicious in the former state, because it is a stimulant, and the patient is already in a state of excitement; but then it ought to agree in the latter state, which it certainly does not. A patient labouring under acute phrenitis is in a condition of extreme excitement, yet mercury is given, and is highly beneficial. The fact appears to be, that the diseases in which the most acute inflammation, the most extreme excitement prevails, are those in which mercury effects its greatest miracles. It is not because the patient with an inflamed sore is in a state of excitement, that mercury is not indicated, but it is because a certain state of system, one in which the secretions are tolerably healthy, the functions tolerably well performed, the vascular action neither above nor below par, is the best adapted for a mercurial course. To this condition the patient must be brought—if he have pyrexia and depraved secretions, by diaphoretics, and quiet, and purgatives, into which mercury may freely enter—if he be debilitated, by generous diet, sarsaparilla, tonics or stimulants, according to the circumstances of the case. Such seems to us to be the practical rule in the administration of mercury, such we have acted and act upon, and we have never had reason to regret our having done so. To return to Mr. Wallace—

"It can scarcely be necessary to observe here, that the rule of abstaining from mercury during the stage of ulceration, as well as the other directions given in this chapter, are applicable only to the regular form of primary syphilis; for, if the actions of reparation be so very slow in commencing as to lead us to fear contamination of the system; or if the ulcerative action be advancing in any case with such rapidity as to endanger the loss of parts of importance, &c. &c. we must act on a different principle, as will be pointed out hereafter. What I have said hitherto, applies, therefore, solely to those cases of primary syphilis, that are not complicated; or, in other words, that are not attended by any of those diseased states or actions, which, whether depending on constitution, mode of living, or previous treatment, &c. produce such varieties of disease, as deviate more or less from that above described, and hence require corresponding peculiarities of treatment." 111.

The topical mercurial applications enumerated by Mr. W. are, in succes-

sion from the least stimulating to the most so,—calomel, calomel in lime-water, mercurial ointment, citrine ointment, muriate of mercury in lime-water, and muriate of mercury in distilled water. The milder application should be used first; it is often advantageous to alternate them, and sometimes to intermit for a day or two all mercurial applications, using in the meantime weak solutions of the nitrate of silver, or the sulphate of copper, or distilled water, or an aqueous solution of opium. These and other stimulating applications should be used according to the condition of the sore. We fully agree with Mr. Wallace in his wish to cure the primary sore as speedily as possible. When once we have made up our mind as to its nature, we may as well accelerate cicatrization by judicious topical applications. We condemned the application of caustic in the first instance, because, though Mr. Wallace denies that he has witnessed unpleasant effects from its employment under such circumstances, we maintain that we have: because it is often very difficult to pronounce at first upon the character of the sore, and caustic mystifies it: and, lastly, because we always desire to see a sore taking on a healing action under the general treatment, the best indication of its propriety. When once we are satisfied of the nature of the sore, and when the general treatment is manifestly agreeing with it, there can be no good reason for allowing it to remain unhealed one day or one hour longer than is necessary. We now arrive at the mode of exhibiting mercury internally. We will give Mr. Wallace's sentiments and mode of practice.

"In dispensary practice, and among the lower ranks of society, the internal administration of mercury, particularly at inclement seasons of the year, can seldom with safety be recommended. In such persons, and under such circumstances, topical applications are of infinite value. In cases of this kind, I generally confine my treatment to them, in conjunction with the internal use of nitrous acid; and by these means, I succeed for the most part in healing the disease with rapidity. Cases treated in this way are also very seldom followed by secondary symptoms. Whether this be owing to the topical application of caustic and mercury, or to the internal employment of the acid, I cannot as yet pretend to say decidedly; but probably both contribute.

The blue pill and the submuriate and muriate of mercury by the stomach, mercurial ointment by friction, and the red sulphuret of mercury by fumigation,—are the mercurials commonly employed by me in treating primary syphilis, with the view of exciting and supporting the necessary degree of mercurial action in the system.

Whatever mercurial preparation be used, it will be always most prudent to combine it with opium and antimony. No harm can result from this practice; and by it, much inconvenience may perhaps be avoided. The combination of antimony with mercury has always appeared to me to render the influence of the latter more manageable, as well as more certain; while the addition of opium diminishes the irritating influence of mercury on the bowels, and subdues the disposition to an irritable state of the general system, or of the local disease.

Calomel combined with opium, and with either antimonial power or tartarized antimony, is a very useful form of medicine. In the greater number of cases, this combination may be used until a sufficient degree of mercurial action has been excited; but it should in general be omitted as soon as the gums or breath testify even the mildest influence of mercury; and a solution of the corrosive muriate substituted for it. By this medicine the mercurial action may be kept up in a sufficient degree, without the risk of exciting a troublesome salivation;

and this change of the mercurial preparation will also be as beneficial as the alteration of the topical applications, already recommended upon the same principle. This principle may be carried even further with great advantage; and mercury may be omitted altogether for some days; during which the patient may take the nitrous or any other mineral acid, either with or without sarsaparilla.

The quantity of calomel required will vary in different individuals. I do not in general hesitate to begin in common cases with six grains a day in divided doses, combined with the same quantity of antimonial powder, or with the eighth of a grain of tartarized artimony, and one grain of opium. It is, sometimes, necessary to increase, or even to double the dose of calomel. At other times, it will be prudent to employ smaller doses, but in this case I would prefer to give five grains of the blue pill night and morning, combined with a quarter of a grain of opium, and with tartarized antimony, or antimonial powder, if the stomach will allow either.

When the muriate is administered, two-thirds of a grain of this salt, dissolved in a sufficient quantity of distilled water, may be given, in divided doses, during the twenty-four hours. But should this solution disagree with the stomach or bowels—an event which not unfrequently happens—it must be omitted, and the blue pill combined with opium, &c. given in its stead.

Friction with mercurial ointment, or fumigation with the sulphuret of mercury, will not be necessary, unless there exists a natural delicacy of bowels to the action of mercury: or unless the system is not easily influenced by this medicine, when taken internally. In case it be ascertained from former experience, that the individual is very susceptible of mercurial influence, the muriate in solution, or the blue pill with opium and antimony, should, from the commencement, be employed.

Although I am not prepared to deny altogether the hypothesis of Hunter and Delpech, that a peculiar advantage results from employing mercurial frictions in primary syphilis, in consequence of the mercury being thereby conveyed into the system through the same channel which conveys the virus, I very seldom think of directing them, because of the great objection which patients have to their employment, and because of the obvious inconvenience attendant on them.

A very mild mercurial action must be kept up in the constitution, not only until the ulcer is perfectly healed, but if there exists no cause of objection from adventitious circumstances, until all tumidity or hardness of the base upon which it was placed has been removed; for this is the criterion by which we are principally assured that all diseased action has ceased. It is at the same time to be observed, that now and then cases occur, in which the disease leaves after it a state of callous induration, which is persistent, and cannot be influenced by treatment. A little attention will, however, enable us to distinguish such cases from those in which we should persevere in the use of mercury until all callosity has been removed. It should be also remarked, that the ulcer may heal, and that all induration may be removed sooner than it would be prudent to leave off mercury. In these latter cases, although we must take into consideration the quantity of this medicine which has been used, and the effects which it has had on the constitution, it may be said that the system should be kept under the mild influence of mercury, for ten days or a fortnight, after the ulcer of primary syphilis has cicatrized." 116.

It is an important fact, if strictly correct, that Mr. Wallace's dispensary patients are usually cured without the internal exhibition of mercury. We do not find that the out-patients in our London establishments either bear mercury badly, or are more curable without it than other persons. We have treated many under these circumstances, and have never seen reason to

regret its employment, and frequently we have been compelled to resort to it from the supervention of secondary symptoms, or the inadequacy of other modes of treatment.

There is a point on which we cannot altogether agree with Mr. Wallace. He seems to give the preference to calomel among the mercurial preparations, and he observes, that as soon as the gums or breath testify even the mildest influence of mercury, this (the calomel) should be omitted, and a solution of the corrosive sublimate substituted for it. We are fully aware of the advantage of occasionally changing the mercurial preparation, but the circumstances that appear to us to call for the alteration are, a difficulty of affecting the mouth by one form, or, if the mouth is affected, an obvious tardiness of improvement. Under such circumstances, we have seen very marked advantage from substituting one mercurial preparation for another. But we do not so clearly understand why, if one preparation is succeeding, it should be superseded by another, and that the least efficient and the most capricious of all, the oxymuriate. In fact, we like neither the calomel in the first instance, nor the oxymuriate in the last, the former being as much too active and too debilitating as the latter is too uncertain. Mr. Babington has remarked that calomel seems best adapted to those cases in which the tone of the system is high, the patient vigorous, and the disposition towards inflammatory action. Under other circumstances, the milder preparations, the blue-pill, or the mercurial ointment, are preferable to it. We had rather put a patient on a steady course of one or other of these than adopt Mr. Wallace's method.

Whilst we make these remarks we are far from undervaluing Mr. Wallace's caution with regard to the mercurial action on the system. We trust that the days of salivation and erythismus are past, never to return. In the immense majority of cases there is no necessity for doing more than gently affecting the mouth; this is a sufficient test of the mercurial influence, and beyond this we need not carry it. But we feel inclined to think that this can be done as well by one mild, though efficient preparation, as by two or several. There can be very little question, at least there is little with the surgeons of the greatest experience in these matters, that the mercurial ointment is, on the whole, the mildest and the most certain of the forms of mercury. The great disadvantage attending it is its inconvenience, which renders private patients averse to it. Next to the ointment we would rank the blue-pill. Mr. Wallace's combination of opium and antimony with this is good, but we have found the junction of conium generally effectual in preventing any tendency to griping or diarrhœa, and less objectionable, in some respects, than that of opium. The dose may be five grains of the blue-pill and five of the extract of conium, to be taken twice daily. We do not think that Mr. Wallace has sufficiently dwelt on the relative effects of the various forms of mercury. Each is of use under certain circumstances, but their selection must be guided by considerations into which Mr. Wallace might have entered more fully with advantage.

It will be observed that Mr. Wallace lays down two criteria to determine the time during which the mercurial course should be continued—the healing of the sore, and the disappearance of induration in the cicatrix. The remarks on the latter head are extremely just. In order to shew how carefully the state of the cicatrix should be attended to, we will mention

one case out of those which are occurring to us almost daily. A gentleman had three sores on the inner prepuce, the appearance and history of which led us to believe that they were decidedly syphilitic. In consequence of some derangement in his general health, we merely prescribed light purgatives. The sores healed in a week or ten days, and a bubo, which existed in the groin, had not increased. A surgeon of some experience now saw the case in consultation, and recommended that no mercury should be given. We were of the contrary opinion, but it was finally determined that the patient should take his chance without the mineral. In a fortnight or three weeks from this time the gentleman again came to us. The cicatrices of the sores were severally indurated, feeling like peas in the skin, the colour of the latter was rather florid, and the bubo was in a state of suppuration. We put the patient on five grains of blue-pill twice daily, and gave him sarsaparilla: the bubo was opened, the skin, which had been extensively discoloured and likely to ulcerate, recovered itself, the cicatrices lost their induration, and, after going through a course of five weeks, the gentleman left town in a state of better health than he had felt at the commencement.

While we cordially agree with Mr. Wallace on the propriety of carefully attending to the condition of the cicatrix, we feel disposed to doubt the safety of his advice on the discontinuance of mercury so soon as ten days or a fortnight after the cicatrization of the sore. Mr. Wallace is speaking of an ulcer which heals early, and, by judicious local applications, the syphilitic sore will often cicatrize in the course of a week. Under such circumstances, we should not consider it prudent to keep up merely a mild influence for ten days or a fortnight afterwards. It appears to us that if we subject a patient to mercury at all, we should not do so by halves. Experience proves but too truly, that a great majority of the cases of secondary symptoms are those in which mercury has been given for only a fortnight or three weeks. In general we would give a course of a month or five weeks, however early the sore might have cicatrized. Under judicious management the patient's health will be little, if at all, the worse for a course of this duration, and if he is rendered more secure we cannot comprehend why it should be curtailed.

Mr. Wallace observes that there is not, in general, a necessity for rigid confinement, and that the patient may follow his usual avocations, if he protect himself from cold and damp. Temperature and climate exercise an undoubted influence over the disease and its treatment. In mild and temperate regions it is more tractable than in northern countries or in inclement seasons. Mr. Wallace makes the following remarks on diet.

"It will be highly necessary that the patient attend to the quantity and quality of his nutriment. All stimulating articles of diet, as also acids and ascescent and flatulent vegetable food, or whatever might disorder the bowels or disturb digestion, should be as much as possible avoided. The quantity of nutritious food should in general be less than the patient is in the habit of using. A small portion of wine or of his usual beverage may be allowed to preserve appearances; but such a quantity as would excite or hurry the circulation, is most studiously to be avoided. The process of digestion and a healthy state of the bowels, of individuals under the action of mercury, are often much promoted by the mastication and deglutition of grains of allspice or pepper occasionally during the day, and by covering the abdomen with two or three folds of flannel.

In case it should be of importance to the patient to remove that fetid breath which is in some measure inseparable from the anti-syphilitic action of mercury, this may be effectually done by those lozenges, containing a portion of chloruret of lime, which have been manufactured by my directions, for this purpose, at the establishment of Bewley and Evans of this city. These lozenges will also contribute to the prevention or removal of any tenderness of gums produced by mercury." 118.

We must say that we differ from Mr. Wallace. We have generally found a diminution of diet during a course of mercury prejudicial. We are not for stimulating patients; far from it. But we feel convinced, from experience, that in the majority of cases, a diminution of diet and the exhibition of mercury at the same time, are extremely likely to injure the health, and protract rather than expedite recovery, We always make it a point to ascertain what the patient has been accustomed to take in the way of food and of stimulus, and to put him as nearly as possible on his usual footing.

Mr. Wallace remarks that the case must be carefully watched, and alterations in the condition of the sore met by appropriate alterations in the local and general treatment. If the sore becomes inflamed or irritable, the mercury should be discontinued and antiphlogistics had recourse to, until those morbid states are removed. If, on the other hand, it becomes indolent, or increase in dimensions, we must endeavour to ascertain whether this arises from an insufficient or an excessive quantity of mercury, and increase it or withdraw it accordingly. Mr. Wallace very properly reprehends the hypothesis, that mercury cures the venereal disease by producing a kind of mercurial fever. The fact is, mercury answers best when it agrees with the local symptoms and the constitution. Mr. Wallace concludes this part of his subject by again reiterating his advice, that mercury be not exhibited whilst there is any inflammation or irritation. He generally precedes it by purgatives, or, if the patient is plethoric by the abstraction of twelve or eighteen ounces of blood. We have usually found salines and purgatives sufficient without venesection, and when we reflect that we are usually obliged to build up our patients after the second or third week of the course, we are led to pause before we unnecessarily deplete them in the first instance.

Mr. Wallace makes few observations on the disease in the female, as he says that its characters do not differ from those which it presents in similar structures in the male. In this we think that Mr. Wallace displays unprofitable brevity. We have always found the disease capricious, and sometimes more intractable in the female than in the male, but, at all events, it certainly presents very marked peculiarities, and is attended with many anomalies in the former. As Mr. W. has waived the subject we will not enter on it, but it is one on which there is much to be said.

Mr. Wallace makes some observations on the treatment of pregnant women affected with syphilis. There can be no question that under such circumstances, both the mother and the fœtus have the best chance of doing well, if mercury is cautiously and judiciously employed. Looking at the subject theoretically or practically, this would seem, and is really, the best practice, whatever has been urged to the contrary. But, if the disease be contracted shortly before parturition, the probable escape of the fœtus, and the approaching confinement of the woman, conspire to render delay advisable.

There are many curious facts to which Mr. Wallace has not adverted. We will mention a case in illustration of one. A pregnant woman had syphilis; but what the precise symptoms were, we cannot say. She was treated with mercury in the Lock Hospital of London, was apparently cured, and was discharged. Some time afterwards she was delivered; the child, in two or three days after birth, became covered with a syphilitic eruption, and at the end of the third week it died. She has been pregnant twice or thrice since that time, and on each occasion the child has been attacked with the syphilitic psoriasis or lepra in a few days after birth, and died at the end of a fortnight or three weeks. The mother is a married woman, is apparently healthy, has neither discharge nor secondary symptom of any sort, and has not communicated any disease to her husband. Here we see a woman, to all appearance cured of the disease, producing successively infant after infant affected with it. As a contrast to this, we will mention another case. A woman, far advanced in pregnancy, was admitted into the same Institution, covered with that horrible eruption, half tubercle, half crust, which seems to be a compound of syphilis and cachexia, and which too often follows the improper use, or rather the abuse, of mercury. By sarsaparilla, and means of that description, she was greatly benefited, and left the hospital to be confined. She gave birth to a fine child, which has continued healthy. We might mention many other curious facts, and, indeed, we might readily consume our space in the detail of cases illustrative of the anomalies of syphilis in the female. It surprises us not a little, that Mr. W. has treated this part of his subject so lightly.

Mr. Wallace observes that females bear mercury worse than males, and that larger quantities of opium must usually be combined with it in the instance of the fair. We so rarely see syphilis in females in the upper classes, that we will not answer for them; but certainly the abandoned class of women in London bear mercury tolerably well.

Mr. W. observes that, if a woman contract the venereal during the state of lactation, that state is not, *per se*, an obstacle to the use of mercury. We would say that the child should certainly be put to nurse, or weaned, if a mother contracts the disease, as both this and the effects of mercury might be communicated through the medium of the milk. Menstruation is no impediment to the administration of mercury.

Phagedænic Primary Syphilis.

Mr. Wallace uses the term phagedæna, as Mr. Abernethy has done, to express every form of destructive sore, whether owing to ulceration or sloughing. We do not think this a good arrangement, as phagedæna should be limited to that species of action in which there is a mixture or alternation of ulceration and of sloughing. If the latter preponderates greatly, it does not differ from mortification, and should be termed and considered such. To shew the impropriety of confounding these two states, we will merely cite two cases.

A young man had a sore in the groin, the result of neglected and mismanaged bubo. The edges of this were incautiously cut away, and stimulating dressings applied. The surface of the sore became of a yellowish ashen colour, the edges tumid, and presenting a superficies of slough, the

part extremely painful. Day by day the sore became deeper, its surface always retaining the same appearance, the edges were also removed, increasing the diametrical extent of the ulcer, and at last the epigastric or the femoral artery (for it was not certain which of the two was implicated) gave way, and alarming hæmorrhage ensued. This patient was saved. The sore, when narrowly watched, was observed to increase, by a sort of succession of superficial sloughs, but still the ulcerative action was vigorous, and an eschar was never found in the wound. The sore was always on the increase, but this seemed as much the result of a process of absorption as of sloughing. This was phagedæna.

Another young man presented himself with the prepuce swollen, œdematous, and red, and a circular black spot was observed upon the glans. By the next morning half the glans was black, and on that evening the whole was so. In two or three days the glans fell into the pot, a putrid slough. A healthy sore was exposed, and in a week the patient was pursuing his usual avocations. This was mortification.

Surely these two conditions require separate denominations—surely a common term must create confusion. Mr. Wallace, however, employs a common term, and it is phagedæna. Let our readers recollect this.

We have yet to be convinced that there is such a thing as phagedænic primary syphilis. We shall see in what sense Mr. Wallace proposes it. He acknowledges, and this is an important admission, that phagedænic sores of the most opposite characters may present an exactly similar appearance at their origin; in fact, "that any of the forms of primary syphilitic phagedæna may commence by a pimple or a pustule; and that an excoriation, or abrasion, or wound, or ulcer of any form, or on any structure, or at any period of its progress, may assume a phagedænic character." This is all most true; and Mr. Wallace might have added, that any sore may assume a phagedænic character, not distinguishable from what is called syphilitic phagedæna, although there is not and cannot be anything approaching to syphilitic action in the case. In short, phagedæna is not a proper or specific, but a common action, and may occur, as inflammation may occur, in any kind of wound or ulcer. But we anticipate.

Under these circumstances, Mr. Wallace has not distinguished the varieties of phagedæna by the nature of their origin, but by the character of their progress.

"Phagedænic primary syphilis may extend either by ulceration, or by sloughing; and the sloughs may present a more or less white, or a more or less black colour. These are characters which can be easily ascertained, and according to them the SPECIES of these destructive sores may be classed. Again;—the state or degree of inflammation, and of sensibility or irritability attendant on phagedænic sores, is very different in different cases; and by these differences, which we can always appreciate, the VARIETIES of each species may be distinguished. It will also be sometimes necessary to take into consideration certain SUB-VARIETIES, resulting from age, habit of living, &c. &c." 131.

Mr. Wallace divides phagedænic primary syphilis into three species, and each species into three varieties—occasionally with sub-varieties. A sore may have a compound character; it must then be judged by the predominating and the worst. His species are these:—1. Without slough. 2. With white slough. 3. With black slough. Each species is divided into

three varieties :—1. The simple. 2. The inflamed. 3. The irritable. So that we see the species is determined by the presence or absence of slough —the variety, by the presence or absence of inflammation or irritability.

I. Phagedænic Primary Syphilis, without Slough.

The characteristic of this is the extensive or rapid destruction of tissue by ulceration. It comprises, in accordance with the preceding arrangement, three varieties :—The simple phagedænic ulcer—the inflamed phagedænic ulcer—and the irritable phagedænic ulcer. Mr. Wallace very properly observes that, strictly speaking, there are few phagedænic sores that have not some slough ; but in these the ulcerative action prevails.

A. *Simple Phagedænic Primary Syphilis without Slough.*

Its characters are extensive and sometimes rapid ulceration, without much inflammation or irritability. The surface is, in general, if not altered by mercury or other dressings, of a dusky yellowish white colour ; and very frequently serrated or nibbled at the margin and edge, which are often sharp and pependicular, or slightly undermined. The surrounding parts present a deep or livid red and swollen appearance, but there is not that circumscribed induration proportioned to its extent which is observed in the regular syphilitic sore.

"It sometimes exhibits a remarkable disposition to penetrate, rather than to extend along or over the surface. Hence it is, that when it occurs at the corona glandis, it often makes its way, if neglected or mismanaged, between the integuments and body of the penis, or else through the root of the prepuce externally ; and when it attacks the region of the frænum, it often penetrates so deeply as to open the urethra, although the ulcer may not in either case appear externally to be making much progress. On other occasions, this form of phagedænic primary syphilis will continue to extend its ravages at the circumference of the ulcer after the process of granulation has commenced, or is making considerable progress in the middle of the sore." 135.

When it attacks the prepuce or the glans, it sometimes rapidly destroys these parts without producing much pain. The constitution appears to sympathise greatly with this sort of ulceration. If it is at all rapid in its progress the patient becomes in a few days pale and languid, but he does not suffer so much local distress as might be anticipated. The following is the treatment recommended by Mr. Wallace.

"It is necessary, whenever we meet with a case of the simple phagedænic primary ulcer, if it has not been previously complicated by improper treatment, to subject our patient to a course of mercury,—regulated according to the principles formerly laid down ; and we shall always be gratified by the result. But if, on the other hand, the patient has been dabbling with mercurial remedies, and if there be reason to suppose that his constitution has been, in consequence, more or less disordered, we shall act more judiciously by suspending for a time the use of mercury ; and endeavour, by proper measures, but principally by attention to the mode of living of our patient, and by the use of the mineral acids with sarsaparilla, to restore the system to a state of tranquillity, before we enter again on mercurial treatment ; which may, however, be then used with success." 137.

The local treatment recommended by Mr. W. differs little from that pur-

sued by him in the simple syphilitic sore. He has found fumigation of the part with the red sulphuret of mercury beneficial. Mr. W. observes, that in conducting the treatment of this form of sore, much caution, and attention to the rules already laid down, are necessary.

There is one circumstance to which we cannot forbear adverting. Mr. Wallace states that, this form of sore differs from the regular one of primary syphilis in little more than the severity and extent of the ulcerative stage. Now, it will be recollected that Mr. W. discountenanced the use of mercury in that stage of primary syphilis, yet here, where it is exaggerated, he preserves the employment of mercury. Logically this is an obvious inconsistency, but practical facts are superior to logical agreements.

In our observations on "the primary syphilis," we stated that we did not entertain much repugnance to the administration of mercury during its ulcerative stage, if certain precautions were attended to. There we went farther than Mr. Wallace. We must own that our experience, such as it is, leads us in the present instance not to go so far. If, as Mr. W. freely admits, any wound, abrasion, or sore may take on the phagedænic character, it is more than probable, it is almost evident that the character in question is accidental, that is, dependent on circumstances unconnected with the original virus. Now mercury is given for the original virus, and we cannot understand, as a matter of reasoning, why it should be "almost indispensable" in the treatment of that which is unconnected with the virus. Setting aside the reasoning, we are convinced of the contrary, as a matter of fact. We will mention a case or two in illustration.

A man was admitted into the Lock Hospital of London, with a circular syphilitic sore on the dorsum of the penis. He had been accustomed to live freely and to drink spirits and beer. When admitted he was purged, put on the broth diet of the hospital, and of course was deprived of his accustomed stimulus. In the course of a few days the sore began to spread with rapidity and had all the characters of phagedæna, without slough. He was immediately put on a generous diet, and allowed a pint of porter daily, and the sulphate of quinine was prescribed. In a few days the phagedænic action ceased, the sore became healthy, cicatrization commenced, and then, but not before, he was put on mercurial inunction. The sore healed rapidly.

Another patient was admitted into the same Institution, with a sore on the lower part of the glans and prepuce; it had destroyed the frænum. It had commenced three months previously, and it had all the characters of a syphilitic sore, rather sloughy, and not likely to do well without mercury. Besides the sore, there was a small pustular eruption. This patient was a cook at an eating house, and had been accustomed to live well, and to take excessive quantities of ale and porter. He had merely taken some corrosive sublimate at the commencement of the complaint. Soon after his admission (May 13) he was ordered to rub in the mercurial ointment, and was allowed the broth diet of the house. On the 25th, the sore was extending rapidly by phagedæna on the glans and on the prepuce, and there was some disposition to bleeding. The mercury was immediately omitted, a pint of the decoction of sarsaparilla daily substituted for it, and the patient put on a very full meat diet, with a pint of porter daily. In two days the phagedænic action had ceased, and in five days (the 30th) the sore was more than half

healed. This patient subsequently went through a mercurial course for the secondary eruption to which we have alluded.

We really do not exaggerate when we state, that we could crowd these pages with cases of this description, cases displaying phagedæna as evidently unconnected with the primary virus and dependent on external and fortuitous circumstances, cases proving as satisfactorily as cases can do so, that phagedæna *per se* does not require mercury, but on the contrary, is most generally aggravated by its employment. The two cases, however, which we have related, appear to us to be conclusive on this point, at all events we can dwell on it no longer. As we proceed with Mr. Wallace's account of the other species of phagedæna, we shall take occasion to enlarge upon the question.

B. *Inflamed Phagedænic Primary Syphilis, without Slough.*

This differs from the preceding in the degree and other characters of the surrounding inflammation and swelling. It is, according to Mr. W., seldom observed unless under circumstances of great neglect, and in persons of good constitution, though, perhaps, of dissolute habits. The degree of constitutional derangement is, in general, comparatively trifling, although the local inflammation may be great.

It may occur on any part, but the ulcers that more commonly assume this character are those situated on the internal surface of the prepuce, at the corona glandis, or at the side of the frænum; they almost constantly produce either phymosis or paraphymosis. When the former occurs, it is, of course, difficult to form a decided opinion on the nature of the sore. But Mr. W. observes that this information is not, on the whole, so important as it might seem to be, and therefore that the operation of dividing the prepuce is seldom necessary.

Inflammation may attack a primary ulcer during any of its stages, but most commonly it does so during that of ulceration; even if it occurs in that of granulation, ulceration is generally produced, so that inflamed phagedænic sore is rarely seen in a state of granulation.

Mr. Wallace observes, that the treatment of inflamed phagedæna consists in the abstraction of blood generally and locally, emollients, in short the antiphlogistic treatment, until the inflammatory action is subdued, and the sore brought to the condition of ordinary phagedæna, when the treatment adapted for that is to be substituted.

"It sometimes happens, when the inflamed phagedænic ulcer is seated at the corona glandis, that the matter is not discharged as fast as formed,—owing either to a tightened state of the orifice of the prepuce, which obstructs the escape of the matter, or to the tumefaction of the glans preventing the matter from coming forward. In either case an abscess is formed, which may open outwards at a point correspoding to the corona glandis, or the matter may burrow under the fascia of the penis, and extend even to the pubis, before it makes its way externally. In the former case, if the disease be mismanaged, the prepuce may be lost; while in the latter case, a most troublesome form of fistulous abscess may be produced, which will require many weeks to heal. These unpleasant consequences are, however, easily avoided by an early incision into the prepuce at the point corresponding to the abscess. The matter may in this way be freely discharged, and the opening will afterwards heal without much trouble. Should the matter have passed under the fascia of the penis, a larger opening will be

required—otherwise the matter will still lodge; and although it may in such a case be partially discharged, the fistula will not heal, and a troublesome indurated state of the parts will result. When such an occurrence has unfortunately taken place, the disease must be treated according to those principles which will be hereafter laid down for the management of fistulous buboes, &c. &c." 143.

Mr. Wallace appears to have a great objection to slitting up the prepuce; when he does so, it is at the side of the frænum. We confess we do not participate in Mr. Wallace's repugnance to this operation, and, when we are fearful of mischief beneath, we make no hesitation of performing it. We have several times had reason to congratulate ourselves on having done this, and in more than one instance have we seen the let-alone practice followed by mischievous results.

In paraphymosis of recent origin, and attended with much inflammation, Mr. W. recommends that the patient be immediately bled, and that the process of reduction be assisted by making many minute punctures in the swollen prepuce. If this fail, the stricture must be divided; it is generally concealed between two tumid rings, one before, the other behind it, and mistakes are often occasioned by this circumstance. If the paraphymosis has been of many days' standing, it will sometimes be imposssible to reduce the prepuce, even after the stricture has been divided. This is owing to adhesions having been formed, and prolonged attempts at reduction are injurious, as well as ineffectual.

"It is not uncommon for a penis, which has a naturally short prepuce, or which presents a kind of congenital paraphymosis, to appear, merely in consequence of a great degree of subcutaneous effusion, to labour under a paraphymosis with stricture, when in reality no stricture exists. It is therefore important to inquire in every case of apparent paraphymosis, what may be the natural conformation of the parts affected. It should however be observed, that even when there exists a state of natural paraphymosis, the inflammation and tumefaction may cause a stricture by increasing the tightening, behind the glans, of the comparatively unyielding orifice of the prepuce; and it may then be almost as necessary to liberate the stricture, as when a common paraphymosis has taken place; but in such cases there is of course no use in making an attempt after the division of the stricture to bring the prepuce over the glans, as its natural length would not permit this to be done.

We sometimes find that the prepuce is not sufficiently long to cover the entire of the glans, and yet long enough to extend over the corona glandis; when this state of conformation exists, a kind of semi-paraphymosis or semi-phymosis may be produced, in which the seat of the stricture is neither behind nor before the glans, but about the middle of this part. When such an event occurs, it may be necessary to liberate the strictured part by an operation similar to that above recommended for phymosis." 147.

C. *Irritable Phagedænic Primary Syphilis, without Slough.*

This is in general a consequence of mal-treatment, in peculiarly nervous or irritable constitutions. It is always extremely sensitive, particularly at night; when it is for the most part attended by such an increase of pain as to deprive the patient of rest. There is no proportion between the inflammation and the pain or sensitiveness attendant on it, for the latter far exceeds the former; yet there is not unfrequently a light, diffused, rose-coloured blush round the ulcer, which vanishes however on the slightest pres-

sure. This ulcer appears sometimes very clean on its surface, and sharp at its edge and margin, as if cut by an instrument. On other occasions, its edge is more irregular or nibbled, as it were, and raised above the surface of the sore, but more rarely above the surrounding surface. The skin forming the margin of the areola, unless when it has been undermined, is never turned over, or rounded, as in some other forms of the primary syphilitic ulcer. There is little, if any induration of the base or circumference of the ulcer, and no disposition to regular granulation. In fact, for the most part the destructive process seems to go on steadily; the ulcer not exhibiting any steady disposition to the processes of reparation, or to those processes which seem to be ordinarily set up for the limitation of disease.

These ulcers frequently assume a herpetic character, healing on one side and spreading on the other. Mr. Wallace alludes to the difficulty of accounting for this curious circumstance; but he thinks that perhaps it may be owing to a law, "which seems to govern almost all organic actions, *viz.* that any given part loses, sooner or later, its disposition or power to continue any given morbid action, probably upon the same principle, that a given portion of soil will not support, for an indefinite period, any given vegetable production—not even a vegetable production to which the part may have been originally so suited, that it has been indigenous, or has sprung up in appearance spontaneously." We do not see the force of this suggestion. If Mr. Wallace alludes to morbid growths and morbid alterations of structure, we think the parallel not altogether just; for although it is true that the growth or the alteration do not, and apparently cannot, continue indefinitely, yet the tendency always seems to destruction, and not to reparation. If, on the other hand, Mr. Wallace alludes to the reparative processes, under ordinary circumstances, they do not account for these herpetic sores, as we see them regularly occurring on one side, and the actions of destruction as regularly progressing on the other.

Mr. Wallace observes that—

"When we observe an ulcer healing in one direction, and extending in another, we are disposed to presume that this must depend on a local cause; for as the influence of constitution would seem to be necessarily exercised equally on all parts of an ulcer, it does not appear, if all these parts be in the same state, how the same constitution could cause one portion to heal, and the other to ulcerate. We also sometimes observe in the same individual a healing ulcer on one part of his body, and an irritable spreading ulcer on another part. This is in fact a phenomenon, in some measure, of the same character as the former; and although we must presume, that in this case there exists also some local cause of the peculiarity, we are for the most part, if not always, ignorant of the nature of this cause. Such cases are however to be borne in mind, as they materially assist in explaining that combination of sores of different characters, which we sometimes observe to result on the same individual from the same contamination, and the occurrence of which has been used as an argument to prove that venereal diseases are not produced by a specific cause or morbid poison." 150.

We are disposed to devote some attention to this subject, for these herpetic sores are not very unfrequent, are always difficult of management, and not uncommonly end disastrously under injudicious treatment. Mr. Wallace appears inclined to attribute the peculiarity to a local cause. In this we differ from him totally. We believe that the cause is of a constitutional

character; first, because it only occurs, so far as we have seen, in persons whose health is manifestly bad: secondly, because we have always found it yield to constitutional treatment: and, thirdly, because it is not uncommon to find two sores of this description, unconnected with each other, in the same individual.

We have had occasion to observe two species of this herpetic ulceration; in one the action is chiefly in the cutis; in the other it is manifestly seated in the cellular membrane, and the cutis is only secondarily affected. The latter has received, we believe, from some persons, the name of the "burrowing sore," but we do not think the term a good one, as, so far as we have seen, the sore has displayed a disposition to spread superficially rather than deeply, and the designation "burrowing" would convey an erroneous idea in this respect.

Mr. Wallace remarks that the constitutional disturbance is rather of the character of irritability than of fever. The pulse is in general quicker than natural, the sleep is often greatly disturbed, and there exists at times much thirst. The symptoms however are very capricious. In many respects we cordially agree with Mr. W. in the following observations upon mercury.

"Rest, emollients, anodynes, laxatives, together with a suitable regulation of diet, will often be sufficient to remove the morbid sensibility of the irritable phagedænic primary ulcer; and until this end be gained, mercury as a specific should be interdicted; for so far as I have had it in my power to make observations on the mercurial treatment of such sores, this medicine has always appeared to me to be injurious; and if persevered in, an increase of irritability, local and general, hectic and secondary symptoms of a very unmanageable kind may result. But as soon as the irritability of these ulcers is subdued, and the process of granulation has fairly set in, we may cautiously administer mercury, if, after having taken into consideration all the circumstances of the case, we deem it necessary." 151.

We think that the foregoing observations, brief as they are, are sufficient to shew that Mr. Wallace is a practical man. There can be no question that, as a general rule, mercury is pernicious in these herpetic sores; but there can also be no question that it is occasionally indispensable. As an illustration of this principle we will briefly mention the particulars of a few cases.

Case 1. A young man applied to us with ulceration of this character, extending uninterruptedly from near the anterior superior spinous process of the ilium to the anus. Added to this there was a similar sore, unconnected with the former, on the skin of the penis, near its præputial end. The spreading edge was in each the superior, the healing was the lower. The ulceration seemed rather in the cutis than in the subcutaneous cellular membrane. The patient was pale, feeble, much out of health, but not excessively emaciated. We need say no more of his history than this, that the ulceration had existed for five months, and he had been taking mercury for upwards of three. We put the patient on sarsaparilla, occasional purgatives, and the daily employment of the compound tincture of benzoin as a wash. With some occasional variations in the details, this treatment was pursued until the patient was quite well, which was about two months from our first seeing him. He was directed to live well.

Case 2. A man was admitted into the Lock Hospital with two rather sloughy-looking sores, but apparently of a syphilitic character, on the dorsum of the penis. These had existed for some time, and the patient had taken no mercury. He was sallow, and out of health; he had also been a spirit-drinker. Owing, apparently, to the diminution of diet on entering the hospital, the sores in a few days began to spread, coalesced, and assumed the herpetic character, travelling from the root of the penis towards its præputial end. The patient was immediately ordered sarsaparilla, generous diet, and porter. The sore was washed daily with the benzoin. His health improved, and the sore, though retaining its herpetic character, had a better appearance. From some cause or other the sarsaparilla was discontinued in a few days, and quina substituted for it. The sore continued to advance, and at the termination of three weeks it had proceeded from near the scrotum to the loose edge of the prepuce, and had completely encircled the penis; as it advanced it healed on the opposite border, so that it was really no larger at last than at first. The patient was now put on mercurial inunction and sarsaparilla at nearly the same time. The sore rapidly lost its peculiar character, and in ten days or a fortnight it was healed. The patient went through a mercurial course with sarsaparilla and a generous diet, and he has had no further bad consequences.

Case 3. A patient was admitted with darkish inflammatory swelling of the prepuce, and a sloughy sore on its extremity. There was also a bubo, which had ulcerated, in the left groin, and the skin was very dark, and likely to be destroyed. The patient's health was apparently broken down, he was pallid, thin, and so extremely nervous, that he burst into tears on the slightest occasion; the pulse was frequent, the skin rather warm. The history of the case was this:—A sore had appeared on the extremity of the prepuce about nine weeks previous to his admission. About a week afterwards the bubo appeared. He now rubbed in mercurial ointment for about ten days, when he caught the influenza and discontinued the inunction. The sore had healed but left induration. About six weeks previous to his admission the bubo broke, and phymosis became established. The præputial sore for which he applied had appeared about three weeks, and was attended with much pain and a rapid increase. He had been subjected to anxiety of mind, and compelled to exert himself in body. Since the inunction he had taken some oxymuriate.

The patient was put upon salines for a few days, when opium was given him at night, on account of sleeplessness, and quina with generous diet and wine prescribed. At first the præputial sore and the ulceration in the groin extended by sloughing, but after about a week's continuance of this tonic plan the sloughing process gradually ceased, and they assumed the herpetic character. The free prepuce was gradually eaten away till at last the patient was very neatly and very effectually circumcised. The spreading edge of either sore was the superior. After about two months the sore on the penis was quite healed, but that in the groin, though much diminished, continued, and still retained its herpetic character. This sore distinctly spread by successive sloughs in the subcutaneous cellular tissue, the cutis ulcerating subsequently. About the time that the sore on the penis healed, a tubercular eruption appeared on the body. The patient's health was greatly improved,

he had gained flesh and strength, his appetite was good, and he slept without the assistance of opium. This was the time to put him upon mercury. He was directed to rub in about ten grains of the mercurial ointment every night, and when the gums became affected this quantity was diminished. The improvement in the sore was marked and rapid, and at present, this plan having been pursued for about three weeks, it is nearly healed, whilst the tubercular eruption is passing away.

We could give the particulars of some other cases, but our limits compel us to refrain, and these are enough for our purpose. Let us take a rapid glance at the facts which they disclose.

If we cast a glance on the preceding cases we shall observe the following facts, or rather we may form the following inductions. In all, the health was impaired, and that being the only common condition, may fairly be supposed to be the only common cause. In the first case the patient had evidently taken too large a quantity of mercury, and the cure was effected without its further employment. In the second case, mercury was indicated prior to the sore's assuming the herpetic character. This followed a diminution of diet and the abstraction of an accustomed stimulus—circumstances which are well known to be productive of injurious consequences after injuries, operations, &c. The adoption of the tonic plan did not arrest the spreading of the sore, but it improved the health, and then mercury (which had been indicated at the first) was beneficial. In the third case the particulars were nearly similar, with this exception, that mercury had not been withheld, but inefficiently administered in the first instance. The cases, considered in the whole, seem to prove that mercury is neither absolutely necessary nor absolutely prejudicial in cases of the herpetic phagedæna, but that its exhibition must depend upon the history and circumstances antecedent and concomitant. The herpetic character appears to be accidental; but if the case is a syphilitic one, the herpetic character itself seems indisposed to yield, except to mercury. Such, at least, is the conclusion which we have drawn from the preceding and from other cases.

We have not narrated any facts illustrative of the action of mercury, injudiciously administered, on these herpetic ulcerations. It is not because we have failed to witness such, for, unfortunately, we have seen this in several instances. The consequences have been most disastrous—extensive local destruction, and permanent constitutional injury. Nay, we have reason to believe that this form of sore was formerly very fatal, for no other reason, we suppose, than because mercury was lavishly and wildly given for it. Under any circumstances the sore is obstinate and difficult to manage, and perhaps there is none which more imperatively requires discrimination and judgment on the part of the surgeon.

We subjoin some further remarks on the treatment by Mr. Wallace. They appear to us to be characterized by accuracy and candour.

"The reader is not however to suppose that the irritable phagedænic primary ulcer is always so easily managed; for it must be admitted that it will sometimes resist the treatment above suggested. In these obstinate cases, great advantage will often be derived, after the preceding treatment has been employed, from causing a superficial slough along the edges, or on the surface of the sore, by the nitrate of silver; or from touching the edge and margin of the ulcer with the undiluted arsenical solution of Dr. Fowler, or with the strong nitrous acid.

But such remedies do not succeed so often in this form of irritable phagedænic sore, as in some others which will be hereafter considered. Indeed I have known them, when the ulcer was surrounded by a diffused areola, rather to promote than to stop the process of destruction; and to increase that peculiar appearance at the edge of the ulcer, as if a part had been cut out with a sharp instrument. In such cases we must try an opposite system, and we shall thereby frequently succeed in bringing about a healthy state of the ulcer. Thus we may employ a combination of the extract of opium with mercurial ointment in the proportion of a drachm of the former to an ounce of the latter. A dressing composed of the tr. opii with the mel. rosæ, and the liquor plumbi subacetat. will often be found a useful application. The balsams or turpentines will also occasionally succeed, when other means have failed. The uncertainty, however, with which all our remedies act in these and analogous cases, affords a strong proof among many others, of our very imperfect knowledge of those principles which should regulate the application of such agents.

In no case of the irritable phagedænic primary ulcer, are we to neglect the closest attention to the state of the system; for this is often of much more importance than local treatment. I have known some examples of this disease to resist obstinately every topical application, and to improve immediately from change of air. It may be said that the constitutional treatment of this form of disease consists chiefly in the employment of such remedies as will improve the general tone, and tranquillize the nervous system. For the former purpose, mineral acids, the sulphate of iron, the sulphate of quinine, and very minute doses of mercury to act on the secretions, are extremely useful; and for the latter, sarsaparilla, opium, Dover's powder, cicuta, or hyoscyamus. When there is reason to suppose that a state of nervous irritability is kept up by acidity in the *primæ viæ*, and this is not unfrequently the case, such medicines as the carbonate of ammonia, the aqua potassæ, or the aqua calcis, act with advantage. These remedies may be often usefully combined, and benefit derived from their combination, which could not be obtained from them separately. Thus the infusion of sarsaparilla in lime water is a most valuable medicine; calomel or blue pill combined with Dover's powder,—sarsaparilla with opium, cicuta, or hyoscyamus,—sarsaparilla with nitrous acid, &c., will be also found extremely useful; and in some cases, the most decided advantage may be obtained from the carbonate of ammonia with large doses of opium or henbane." 152.

Mr. Wallace finally remarks that the preceding varieties of phagedæna glide into each other, that a sore may be inflammatory at first and irritable afterwards, and vice versâ, and occasionally the same sore will display a combination of the characters of the others, &c.

II. Phagedænic Primary Syphilis with White Slough.

This is a disease of frequent occurrence. Most syphilitic sores have a white sloughy matter on their surface, but those only belong to this head, which have caused or are causing extensive destruction.

A. *Simple Phagedænic Primary Syphilis with White Slough.*

This is perhaps more frequently the consequence of secondary than of primary syphilis. The surface of the sore is covered either by a stratum of white or yellowish-white sloughy matter, or by an incrustation formed by the desiccation or induration of this matter. It is a disease which occurs more frequently on the glans penis than on any other part, and in every situation it is accompanied by very little inflammation, and by still less irri-

tability; but it is always surrounded by a greater degree of induration than any of the preceding varieties of phagedæna.

This disease may commence by the gradual conversion of a comparatively large portion of texture into a whitish slough, or it may begin in the same manner as any other syphilitic sore, and quickly assume its own peculiar characters; that is, any sore may assume the appearance of phagedæna with white slough. The texture of the slough is, in general, more or less stringy or tough. When exposed to the atmosphere it becomes more yellow, then brown, and lastly almost black. When dried it often forms a very hard crust on the sore.

Mr. Wallace remarks that this sore is always influenced in the most salutary manner by mercury; but that the latter if continued generally produces mischief. We must therefore be upon the watch, and if we find that mercury is losing its effects, or that the disease is becoming rather worse, we must instantly suspend it. The nitrate of silver is a good application, but if used too often, it is apt to occasion unpleasant consequences. Mr. Wallace has found large doses of sarsaparilla very useful when it is necessary to refrain from the use of mercury. It was its employment in these cases that first removed from his mind a doubt respecting the efficacy of this medicine. How a doubt ever got into Mr. Wallace's mind, is to us a matter of surprise.

From what we can collect, the sore to which Mr. Wallace has chosen to apply the foregoing denomination, is that which is often left on the separation of the crust of rupia, or of that of any of the varieties of the cachectic eruption. We would caution our readers against thinking so much of mercury, as even Mr. Wallace appears to do. This eruption and these sores are for the most part observed in those who have already been poisoned with mercury. How further quantities of that drug are to unpoison them passes our conception. There are many very curious considerations attendant on the treatment of this form of disease, and it certainly is a fact that small quantities of mercury are occasionally very beneficial. But we complain that Mr. Wallace appears to erect into the rule what we should deem the exception.

B. *Inflamed Phagedænic Primary Syphilis with White Slough.*

Any sore may assume this character, or the sore may present it from the first. In the latter case, it presents, when first noticed, a white slough surrounded by inflammation. This slough sometimes appears a little elevated above the surface, and may then be said to resemble somewhat a particle of curd of milk, having, perhaps, as much the appearance of being a deposition or secretion of lymph on an inflamed surface, as of a portion of the original structure converted into a white slough. These characters are often strongly marked at the corona glandis, or in the angle between this part and the frænum. The white matter or slough, by which this form of disease commences, quickly becomes excavated; and a sore is thus formed, which is lined by a white slough: the edge of the sore seeming also white, prominent, and surrounded by much and extensively diffused inflammation.

Mr. Wallace remarks that it is of great importance to distinguish the inflamed phagedænic sore extending by white slough, from that which extends by black. This should be done by examining the colour of the slough at its

line of junction with the living parts, for in the centre the colour becomes altered by exposure, &c.

This inflamed variety of phagedæna is, like the other inflamed varieties of phagedæna, observed more frequently on the muco-cutaneous than on the cutaneous surface. The disease may occur on the cutaneous surface, and be covered with a crust; but this will not acquire much hardness, as the disease is attended with a great discharge, and spreads with much rapidity. When this variety of phagedæna is extensive, no matter where seated, its appearance is in general very formidable.

"It is remarkable that when this, or any other form of phagedæna, becomes very severe, if the patient has been previously threatened with any inflammation of the glands of the groin, their inflammation often decreases, or even ceases: and I have seen, under similar circumstances, the swelling and inflammation of the penis become less diffused, or more confined to the immediate neighbourhood of the disease. The induration, which may have surrounded the ulcer, also becomes much less. Hence it is that in this, as well as in some other of the phagedænic forms of primary syphilis, we do not observe that hardness, which has by many been considered characteristic of a venereal sore; but the degree of hardness attendant on venereal sores always depends very much on the nature of the adventitious actions, which happen to exist at the same time." 164.

The sore may advance with more or less rapidity, until it destroys a portion, or the entire of the glans or prepuce, when it often happens that a vessel gives way, and the hæmorrhage that ensues sometimes puts a stop to the disease.

When the sloughing process is about to cease, there is a marked diminution of the surrounding inflammation, and the quantity of sloughy matter at the same time decreases. Granulations now soon rise through the remains of this sloughy matter, while the surrounding redness becomes more circumscribed, and less intense, except at the very edge of the sore, where it may probably be increased, and thus forms a margin, in general about two lines in breadth. On the outside of this margin the skin after a time appears of a greyish or pearly-white colour, as if the part was callous; and from the inner edge of this red margin, a new skin proceeds, in general with great rapidity, in the form of a thin, smooth, and clear red covering,—soon followed by a contraction of the parts and perfect cicatrization.

The loss of substance produced by the sore is often less than might have been expected. When the muco-cutaneous surface of the penis is attacked, we are generally unable to observe its progress for any length of time, because phymosis is soon induced. On the external skin, its form of origin would appear, from the description of patients, to be just the same as that of common primary ulcer. On the corona, there is often a peculiar appearance of transverse fibres or laminæ, of a dark colour, exhibited at the centre or between the sides of the sore when they are drawn asunder.

The degree of constitutional disturbance is, for the most part, less considerable than in some other varieties of phagedæna, less formidable in their appearance. Fever, when it is present, has rather the inflammatory type.

The first indication in the treatment is the removal of the accompanying inflammation, which may be accomplished by the ordinary means. General bleeding, however, is seldom necessary. After the excess of inflammation has been subdued, we must treat the case upon the same principles, as those laid down for the management of primary syphilis.

"Having communicated my views respecting the treatment, under ordinary circumstances, of the inflamed phagedæna with white slough, I would beg the attention of the reader to an important fact ascertained by me, *viz.* that mercury, if given in full doses, or so as to produce rapidly its specific action on the system, will control, even in its most inflamed state, the progress of the phagedænic disease just described. This assertion may startle many of my readers, but it is no less true. It may scarcely experience a patient consideration from inveterate anti-mercurialists; but I trust that it will be put to the test of experience by the less prejudiced class of practitioners. I do not mean to say that the employment of mercury is a practice which should in such cases be ordinarily adopted, but I affirm that it will often afford the chief, if not the only instrument of protection to our patient, when this form of phagedæna is making havoc among parts of great importance. But, even then, its administration should be combined with such remedies as are suited to subdue inflammation,—perhaps with copious blood-letting, both local and general, with large nauseating doses of antimonials, &c. &c." 168.

Mr. Wallace has arrived at the conclusion that mercury, given in the cases of inflamed phagedæna that spread by a *white* slough, is beneficial, if administered to salivation. If, then, a case of phagedæna present itself, and if the phagedæna be making rapid progress by white slough in parts of importance, Mr. Wallace recommends the employment of mercury, whether there be much inflammation or not. If there be inordinate inflammation, antiphlogistics should be combined with the mercury. When the progress of the disease is arrested, the mercury should be intermitted, to allow the patient a breathing time; and, as soon as the system and the parts are tranquillized, the mercury may be resumed in a milder form. If mercury be employed uninterruptedly, "mercurial excitement or cachexia" is very apt to supervene.

"Whenever mercury is administered in cases of the inflamed white phagedæna, our attention should be unceasingly directed throughout the treatment to the character of the slough at its junction with the living parts; and should it change from white to black, in consequence of the intensity of the inflammation, or from any other cause; or should the inflammation increase while the patient is under the influence of mercury; or should the surface of the sore become clear of slough without any diminution of the inflammation and irritation; or lastly, should the system of the patient become deranged, while we find any extraordinary difficulty in exciting the mercurial action, the disease at the same time not improving, we must immediately intermit the mercurial treatment, as in such cases it will not serve any useful purpose, and if persevered in, may do infinite mischief.

It is to be here remarked, as a general rule, that a degree of inflammation, which would not prevent me from employing mercury, if that inflammation had existed previous to, or independent of, the action of this medicine, would be quite sufficient to deter me from using it, or would induce me immediately to intermit it, in case such inflammation had commenced while the patient was under mercurial treatment, or in a state of mercurial excitement or cachexia." 174.

Mr. Wallace makes some remarks on inflammation, which amount to little else than that inflammation sometimes is not inflammation, and that Mr. W. does not know what it is. These we may very well pass over. But Mr. Wallace compares iritis to phagedæna, and this we cannot pass over. How any man can see a similarity between these affections, is to us as incomprehensible as Johanna Southcotism. The one is a disease characterised by

by an excess of the reparative action, the other by that of the destructive. Can any two things be more dissimilar. Mercury is useful in iritis; therefore, thinks Mr. W. it may be useful in phagedæna! We leave this to our readers.

We have given the more important portion of this section on phagedæna spreading by white slough. Are we converts to Mr. Wallace's doctrines? No. In spite of all his reasoning—in spite of his one fact—in spite of his false analogy between phagedæna and iritis, we are not converts; we doubt the soundness of his reasonings and the propriety of his treatment. We would not, however, stifle inquiry, and we, therefore, recommend the profession to endeavour to ascertain, whether the circumstance of the sore extending by a white slough is really indicative of the use of mercury. Limited as our space now is, we cannot detail the reasons which induce us to repeat, that we do more than doubt the propriety of Mr. Wallace's advice.

C. *Irritable Phagedænic Primary Syphilis, with white Slough.*

This is rare. When it exists, the sore often heals in one direction and spreads in another. The slough is, in general, more greenish than in either of the other varieties of white phagedæna, and the edges and margin are often reverted, or else undermined.

"The irritable white phagedæna, if it has not been previously mismanaged, is to be treated by short but full courses of mercury, combined with a large quantity of opium, or Dover's powder, or cicuta, or hyoscyamus. It will be useful in this form of disease to employ sarsaparilla in large doses. Much advantage will also be frequently obtained from the carbonate of ammonia, and the anodyne local treatment will succeed more frequently than any other form of dressing. I have, however, seen these sores, when the cutaneous margin was very livid and the edge sharp with great sensibility, much benefited by the application of escharotics to destroy the surface, or of powerful stimulants, as the arsenical solution, to excite to a new mode of action. It may be remarked, that the surface of the sores is uniformly easily destroyed by either the former or the latter class of applications. I have also obtained much advantage on some occasions from blistering the margin of their areola by rubbing it with the nitrate of silver." 180.

Mr. Wallace observes that the constitutions of patients, in whom this form of disease occurs, always require great attention, that relapses are frequent, recovery seldom uniformly progressive, and that the treatment which answers to-day may disagree to-morrow. Mr. W. concludes by observing, that it would appear that all the varieties of this form of phagedæna are, in general, favourably influenced by mercury. We know how difficult a subject this is, how cautiously general rules must be laid down, how contradictory even experience seems to be. Yet we cannot but dissent from Mr. Wallace's conclusion, and we really think that, though mercury, administered by a surgeon of judgment, well acquainted with the disease, and fully impressed with the dangerous character of the medicine he is employing, does in some instances prove highly beneficial, still we doubt the propriety of a general recommendation to its use, and we believe that, on the whole, there would result less mischief were it altogether banished from the treatment of phagedæna, than employed so freely as Mr. Wallace says it may be.

There is one great practical rule to which we always attend, and which, we believe, will save those who do attend to it from many blunders. Never

be in a hurry to give mercury, but always improve the patient's health strength before it is commenced. Of course the means must be adapt the circumstances of the peculiar case; but, on the whole, the immense jority of patients with phagedæna require tonics, stimulants, and good During the employment of these means, destruction seldom goes to an tent, and when the health is improved, we may begin to think of the priety or necessity for the exhibition of the "specific."

It is rather a singular thing that we should differ thus from Mr. Wall but, whether the inconsistency is on our parts or his, we leave to othe determine. In the treatment of the ordinary form of syphilis, we more mercurialists than he, adopt the mercurial treatment on more de principles, and continue it for a longer time. But, in the instance of ph dæna, we do not go so far as he does—we do not consider mercury so u nor have we found it so safe.

In passing from the consideration of phagedæna without slough, or white slough, or what is commonly called phagedæna, and entering on of phagedæna with black slough, which is usually termed mortification cannot refrain from repeating our objections to the term phagedænic sy lis. We have said, and indeed Mr. Wallace acknowledges, that any of venereal sore, the very slightest, may assume the phagedænic chara We will go farther than this, and assert that any kind of sore, indepen of a venereal origin altogether, may take on that character in such a mas as to render it indistinguishable from what is called syphilitic phaged If this be true, and most surgeons of experience will acknowledge it t so, we cannot understand why a common property should be consider specific one. Our own impression and belief are, that phagedæna, *per* in most cases to be treated on the same principles, and in the same mar whether it occur in a syphilitic ulcer or a common one.

III. PHAGEDÆNIC PRIMARY SYPHILIS, WITH BLACK SLOUGH.

Mr. Wallace divides this, like the preceding, into three varieties— simple, the inflamed, the irritable. He observes that this division is hi necessary.

A. *Simple Phagedænic Primary Syphilis, with black Slough.*

The following are the essential characters of this variety. The slou formed on the surface of the sore rather than at the edge, and the l may remain quite free from the sloughing form of destructive action, w this process is extending on the former. This disease is accompanie much greater induration of the surrounding parts than any of the o forms of phagedænic primary syphilis; but exhibits scarcely any inflam tion, and is attended by very little sensibility. The sloughing proce also more slow than in the other varieties of the black phagedæna, and slough frequently presents a diversity of tint, being sometimes of a m lighter colour than at others. It is in fact often of a tawny nut-brown lour rather than black, while the surrounding parts are often of a call or whitish-red colour,—depending apparently on a state of great indurat produced by an interstitial deposition round the diseased surface.

This form of phagedæna may attack the regular "primary syphilis,"

the superficial varieties. It may occur in any situation, but perhaps most commonly on the corona glandis, where it often causes a very deep brownish-black sloughy ulcer, with great surrounding induration. It may commence during any stage of an ulcer; but it is most frequent during that of destruction. It is not uncommon among the out-patients of a hospital.

"This variety of phagedænic primary syphilis, notwithstanding its peculiar and alarming appearance, requires scarcely any form of treatment, either local or constitutional, different from that of the regular primary disease. In fact, the same mode and the same order of treatment may with the best consequences be employed in the one, as have been laid down for the other. I admit that a well-regulated course of evacuants and emollients, with quietness, &c., if persevered in, will in these cases as in almost all the other forms of primary syphilis, retard the progress of the disease, and perhaps induce healing actions. I have also observed, that these cases are very often extremely benefited by the internal employment of either the nitrous, or the nitro-muriatic acids; but the actions of reparation and perfect cicatrization may be produced in them with much more certainty, in a much shorter time, and with less expense to the constitution, by a mild and well-regulated course of mercury, than by any other means." 185.

This is so totally foreign to our experience, that we merely record Mr. Wallace's opinions, and pass on. We will merely add, that we would not, for a good round sum, treat this sore attended with black slough, in other words mortification, by mercury. We do not quarrel with Mr. Wallace's practice, but we would not follow it on any consideration.

Mr. Wallace, indeed, admits that the constitutions affected with this description of sore, often bear mercury ill. Escharotics also easily destroy the surface, and they are easily excited by stimulants. Mr. W. also observes that, where large and long-continued doses of mercury cannot be borne, it will often be of great advantage to interrupt the medicine occasionally.

B. *Inflamed Phagedænic Primary Syphilis, with Black Slough.*

Mr. W. observes, that this occurs under very different circumstances, but under all is uniformly aggravated by the employment of mercury. To contrast this with the former, which he avers to require mercury, he has opposed their characters in two columns, as under.

"SIMPLE BLACK PHAGEDÆNA.	INFLAMED BLACK PHAGEDÆNA.
1. *Attended by little or no inflammation.*	1. *Attended by great inflammation,*
2. *Attended by great induration.*	2. *Attended by little induration.*
3. *Attended by little tumefaction or œdema.*	3. *Attended by great tumefaction or œdema.*
4. *Sloughs principally by the surface.*	4. *Sloughs as much at the margin and edge as on the surface.*
5. *Slough of a brownish black colour.*	5. *Slough of a deep black colour.*
6. *Slow in its progress.*	6. *Rapid in its progress.*
7. *Not attended by great pain.*	7. *Often attended by great pain."* 187.

Mr. W. remarks that the sub-varieties differ greatly from each other in many respects.

1. When gangrene occurs in robust persons, Mr. W. supposes that there be some predisposing cause besides the violence of the inflammation. In general, the patient has been guilty of neglect, or has led an irregular life, or has been injudiciously treated by mercury. This form of phagedæna

may supervene on any sore, or the sore may display it from the first. It is not observed now so often as formerly, probably because mercury is not so indiscriminately employed. It presents various degrees of intensity, sometimes causing the rapid destruction of the entire penis, preceded by more or less violent inflammation; at others, being confined to the edge, or a portion of the surface of the sore. It then produces along the edge a sort of punctuated appearance,—the points being minute portions of gangrened structure. These black points, by increasing in number, often form one continued gangrenous line, surrounded by an intensely red and diffused areola. When the sore is in this state, very little indiscretion will almost certainly cause a rapid increase of gangrene.

Like all other forms of phagedæna, this frequently commences at the corona, and is then soon followed by much swelling and inflammation, with either phymosis or paraphymosis, according to circumstances. In the former case, we soon lose the opportunity of observing the surface of the sore, and if the disease increases, the prepuce continues swelled and often red, with a copious discharge of grumous bloody pus from its orifice. After a time, the portion of integuments corresponding externally to the sore, becomes still more swelled and more red; and if the progress of the disease be not controlled, the central portion of this red and tumid part loses its vitality, and changes into a black slough, which extends more or less; and at last, giving way to the pressure from the inside, the glans protrudes through the opening. It now sometimes happens that the glans, being constricted after its protrusion by the border of this opening, becomes strangulated and sloughs; but, more frequently, the sloughing process of the prepuce continuing to extend, the opening through which the glans has been protruded is thereby enlarged and all pressure removed. The glans is thus entirely uncovered, and the process of destruction often advances, so as to cause not only a kind of circumcision, by removing the entire of the prepuce, but also the destruction of more or less of the penis and scrotum. Often, however, the frænum and immediately contiguous part of the prepuce remain.

The pain attendant on the disease in robust habits is often very severe, and the constitutional disturbance is proportioned to its increase. In the commencement there may be little general derangement, but when the disease has advanced there is much symptomatic fever, and this is succeeded by symptoms of a more nervous character, which may end in the patient's death.

The treatment recommended by our author consists in the combination of evacuants with anodynes and with local emollients. He thinks it will be almost uniformly prudent to take away blood from the arm, and perhaps locally by leeches. Purgatives and emollients, and, after the evacuations, anodynes with antimonials in full doses, enter also into our author's list of remedies. Mr. W. remarks, as all have done, that a spontaneous hæmorrhage is often succeeded by rapid improvement.

Frequently on the cessation of the sloughing action, the eschar separates very quickly, and the process of cicatrization is remarkably rapid. On other occasions, when the reparative process has advanced a certain way, the sore often assumes an unhealthy appearance, ulceration again commences, and the disease may again advance with rapidity.

When the ulcer heals gradually and uninterruptedly, Mr. Wallace recom-

mends that no mercury be given, the sloughing process having probably destroyed the specific poison.

When the reparative process is interrupted, we should endeavour to ascertain the cause of this, whether constitutional disorder, or error in local applications. Having ascertained the cause we should endeavour to rectify it. If, however, we can detect no cause, and if we cannot re-induce healthy action, it is probable that secondary symptoms are about to make their appearance. Are we to suppose that they will do so, and give mercury in consequence, or are we to pause? In the following sentiments we cordially agree with Mr. Wallace.

"Upon this point practitioners do not seem to be generally agreed; but upon my mind there does not remain any doubt that it will be more prudent to refrain from the employment of mercury; for it will generally happen that mercurial treatment will not in these cases control the occurrence of secondary symptoms. On the contrary, if this medicine be exhibited, secondary symptoms will sometimes appear even while the patient is under its influence; for the state of constitution then existing would seem to prevent this medicine from producing that effect, which is necessary to control the influence of the venereal poison; and if mercury be administered in such a constitution, it will, almost inevitably, not only fail to exercise a controlling influence over the effects of this poison, but also render them more obstinate and more severe in their character. This has always seemed to me, as already observed, to be the true explanation, why the symptoms of the venereal disease sometimes return or become aggravated, while the patient is under the action of mercury." 193.

Mr. W. employs, in such cases, sarsaparilla and nitrous acid, and waits for the secondary symptoms to appear before he treats them. These cases must be treated with judgment, and according to circumstances. We are under the necessity of passing over some very judicious observations on phagedæna in those accustomed to spirit-drinking, and can merely allude to the herpetic black phagedæna.

"In the herpetic form of irritable black phagedæna, as well as in that form which is not attended by a diffuse areola, I have very frequently derived the most remarkable advantage from pencilling the edge of the sore with Fowler's solution of arsenic, undiluted. I think I have also seen advantage from its use in cases which were attended by a diffuse areola; but of this I am not so certain. Its application causes in general very considerable pain at the moment, and for some time after; but I have scarcely ever used it in any case, in which the patient did not wish for its repetition, so great is the relief which follows in a few hours after it has been applied; and I have often succeeded by its means in producing a healing action of these sores, after innumerable other remedies had been tried in vain. In cases of a similar kind, I have also sometimes obtained signal advantage from cauterizing the diseased surface with strong nitrous acid; and on two or three occasions there was marked benefit produced by the actual cautery applied along the edge and margin of the sore. It should also be mentioned, that I have sometimes seen the nitrate of silver increase this disease, when applied as an escharotic; and this has occurred in cases in which the application of the nitrous acid has had a beneficial effect.

The constitutional remedies most to be depended on in all the forms of the irritable black phagedæna, are change of air and of occupation, opium, Dover's powder, cicuta, hyoscyamus, sarsaparilla in very large quantities, guaiacum, the carbonate of ammonia, and sometimes the sulphate of quinine." 207.

Mr. W. observes, that it would be vain to attempt the cure of these sores

without constitutional treatment. He dwells, however, on the circumstances of extension by a white or a black slough, prohibiting it in the latter case, encouraging it in the former, and observing that in compound cases we must be guided by the relative quantities of the white slough and the black. Mr. Wallace here, as elsewhere, lays such stress on this, that it is evident he depends very greatly upon it, as a diagnostic mark of great importance. And yet we are very far from being convinced by Mr. Wallace, and, amongst other reasons, for this. We had heard that Mr. Wallace had laid down the distinction, and that he relied very greatly upon it. We were induced, in consequence, to watch some cases that presented themselves to our observation, and they seemed to oppose his views. To one of those cases we have already alluded. It was one of phagedænic ulceration in the groin; it spread distinctly by a white slough, yet that case was cured by a bottle of wine per diem. In another case, which we particularly remember, a young lad was admitted with black slough of the glans of the prepuce. The black slough separated, but some further extension by white slough occurred. This patient was rapidly cured by a bleeding to six ounces in the first instance, and the administration almost immediately afterwards of carbonate of ammonia and port wine. We could mention some other cases, but we would entreat our readers to attend to Mr. Wallace's suggestion, and judge for themselves. We repeat, that our own impression is against Mr. Wallace, but we have not sufficiently investigated the subject to have yet made up our minds.

From what we have already remarked on particular passages, our readers may presume that we are essentially opposed to Mr. Wallace on the subject of Phagedæna. We are so, and why we are so we need not reiterate now. We doubt whether the very nice distinctions of phagedæna into nine varieties will ever serve in practice. There is, in some measure, a difference of treatment for each, a very vital difference in this respect for several, and yet Mr. W. admits that they run into one another, are vicariously interchanged, and their characters are frequently composite and combined. Under such circumstances we feel convinced that attention to the minute rules of Mr. W. would lead to wavering, uncertain, and confused treatment; we feel assured that, instead of diminishing the difficulties now experienced in the treatment of phagedæna, it would augment them. Mr. Wallace, after all, makes mercury the rule for phagedæna. We would make it the exception.

We fear we must stop here. Our analysis has been already too long to allow us to venture on the remaining portions of the volume. These we must defer until our next number, when we hope to conclude the review of the work.

We have freely indulged in criticism, because we think that on such subjects, a reviewer, if qualified to give an opinion, has a right to do so. At the same time, we would beg to disclaim all dogmatism, and to confess that reviewer and reviewed must both be judged by the common sense and the experience of the public. If we have differed from Mr. Wallace we have given our reasons for doing so, and the length of these notices implies our conviction of the merits of their subject. We venture to say that, right or wrong, there are few works of the present day that bear the impress of more patient observation, and more careful consideration than does this of Mr. Wallace. It is highly creditable in every respect.

IX.

A Treatise on the Diseases of the Liver, and on Bilious Complaints; with Observations on the Management of the Health of those who have returned from Tropical Climates, and on the Diseases of Infancy. By *George Hamilton Bell*, Fellow of the Royal College of Surgeons, Edinburgh; late residency Surgeon, Tanjore. One vol. 8vo. pp. 152. Edin. 1833.

Mr. Bell is already favourably known to his professional brethren, by his work on cholera; and his long residence in India must have furnished him with ample materials for the present publication. It is certainly remarkable, as Mr. Bell observes, that so few of our Indian practitioners have recorded the fruits of their experience for the benefit of their successors. The great work of Annesley is a splendid exception; but its magnitude renders it almost useless to the great mass of medical men in our Asiatic possessions. Concise and succinct treatises on particular diseases are desiderata yet in Oriental medical literature, and Mr. Bell has here attempted to fill up one of the lacunæ from notes taken at the bedside of sickness, and subsequent reflexion on the cases there presented to his view. It is not to be supposed that the subject of this volume is only interesting to those who are destined for inter-tropical practice.

"Judging from what may almost be called the fashionable prevalence of bilious affections, one would be apt to suppose that something like an intertropical tendency to liver complaints had been imported into this country. Such a supposition, indeed, is not without plausibility. The sources of what are usually termed hereditary diseases may often be traced to some misfortune, neglect, or imprudence in a predecessor. Thus the habits of living of a father, a grandfather, or even of some more remote ancestor, or a cold which he has neglected, may have engendered the gout, or the consumption, under which his descendants suffer. So it is well known that every one who has been much exposed to a hot climate acquires a predisposition to hepatic affections; and when we remember the number of our countrymen, or of their descendants, who annually return from the intertropical possessions of Britain, labouring under the diseases of the climate, and become fathers of families; or who themselves suffer during the remainder of their lives under the morbid affections which they have brought with them, we shall have no reason to be surprised at the diffusion and very general prevalence of diseases, which have not hitherto been regarded as indigenous in the temperate zones."—*Pref.* vii.

Although we are fully persuaded that many cases of supposed liver complaints are, in reality, affections of the stomach and intestines, yet there can be little doubt that such an organ as the liver must be very frequently disturbed in function, and even altered in structure, by the multitude of causes, moral and physical, which daily operate among all classes of society in this country.

We shall pass over some theoretical speculations on the nature of inflammation, and come at once to the practical. Mr. B. thinks himself justified in subdividing phlegmonous inflammation of the liver into what he terms sero-phlegmon, puro-phlegmon, and muco-puro-phlegmon. The

first makes its attacks on naturally colourless parts—the second, on those vascular parts which, in the healthy state, have red blood circulating, and in which the pain is obtuse, and there is a tendency to the deposition of pus —the third, attacks mucous surfaces, and is accompanied by pain, heat, swelling, &c. terminating in changed secretion, and ulceration. Our readers will readily perceive that the above terms convey what we mean by inflammation of the peritoneal covering, the parenchyma, and the ducts, &c. of the liver. Were it not that every author must do something to correct (sometimes to confuse) the nosological portions of our science, the old mode of arranging hepatitis might have been continued.

I. *Sero-hepatitis.* The following is the concise symptomatology presented by Mr. Bell.

"SYMPTOMS.—Those which are peculiar to this affection, in whatever part of the liver it is seated, are, 1. A sudden attack of excruciating pain in the region of the liver, often so severe that the weight of the clothes is insupportable. 2. High febrile symptoms, compelling the patient immediately to confine himself to bed. 3. The stomach is irritable, and the biliary secretion is generally increased. 4. The patient cannot lie on the left side." 12.

Mr. Bell makes some remarks on the means of distinguishing membranous inflammation of the liver from pleural inflammation in the contiguous portions of the chest; but the distinction is of little importance, since the treatment will be nearly the same. The following passage, however, is worth quoting.

"But it is not only *inflammatory* affections of the colon which may mislead as to existence of hepatitis. Many who have been exposed to tropical climates, or other causes of hepatic affections, acquire a morbid sensibility of the liver, or of the great gut, which sometimes becomes so intense as to give rise to nearly all the symptoms of acute sero-hepatitis. I have seen cases in which this morbid sensibility has been treated as inflammation, the symptoms being of course aggravated by antiphlogistic remedies. We must in such circumstances be guided by the state of the pulse and the skin. The febrile symptoms seldom run high when the pain referable to the liver arises merely from morbid irritability; and it is valuable as a discriminating symptom, that, though the pain of irritability is much aggravated by slight pressure, it is relieved when the pressure is increased. As the treatment of inflammation and morbid irritability is very different, it is of the greatest consequence not to mistake the one for the other." 15.

The etiology of this form of hepatitis, especially in India, is chiefly connected with severe exercise in the heat of the day, together with exposure to wet, as in shooting, &c. Exposure to cold or damp, in all climates, indeed, will sometimes produce sero-hepatitis. In this species it is seldom necessary to put the system under the influence of mercury. The common depletory measures used in pleurisy are proper here. There is, however, an irritability of the stomach attending sero-hepatitis, which requires a peculiar modification of treatment.

"Severe retching is not only a source of injury to the inflamed membrane, but a serious interference with the exhibition of remedies. The above, therefore, is an object of primary importance. It will sometimes happen that a full bleeding quiets the stomach, and enables us at once to exhibit purgatives. Should this not be the case, a scruple of calomel, while it produces the most beneficial effects throughout the whole gastro-enteritic mucous membrane, acts like a

charm in allaying irritability of the stomach. A large dose of calomel, therefore, should be prescribed; and its effects may be forwarded by the application of a large sinapism over the stomach. And effervescing saline draughts, while they are agreeable to the patient, are soothing to the stomach. Should these means be ineffectual in putting an end to the retching, leeches, and a blister to the scrobiculus cordis, must be resorted to." 21.

II. Puro-Hepatitis. Inflammation and suppuration in the substance of the liver produce great havoc among our European settlers in India.

"*Symptoms.* The condition of the hepatic vessels which leads to suppuration in the substance of the liver, seems to be so little different from their usual state (at least so far as is indicated by symptoms), that very frequently the first intimation which a patient has of serious disorder of the system, is what is too often to be reckoned proof of the formation of an abscess. He is attacked with a shivering fit, which is followed by an irregular hot stage, ending in profuse clammy perspiration. Even after this there may be no symptom pointing out the destruction which is going on in his liver. The patient suffers from irregular feverish symptoms, and has the impression that something very wrong is taking place; but neither he, nor probably his medical attendant, is aware that he is stricken with a mortal malady. As the case advances, there are occasional severe shivering fits, and distressing night sweats—the pulse rises—the tongue is furred—and from the appearance of the patient's countenance, it is evident that he is labouring under some great internal disease. Still there may be no symptom referable to the liver; great derangement of the bowels ensues, and there is much suffering from dyspeptic symptoms. In some instances there are severe spasms in the diaphragm, and violent tenesmus. After some days (or it may be even weeks) the patient is attacked with low delirium, and dies as if from effusion in the brain. This is an extreme case.

In the less obscure cases there are fulness, weight, and uneasiness in the right side, increased on pressure. There is pain in the right shoulder, or in the back; there is a dry cough, the stomach is disordered, and the bowels much deranged; and though the bowels may not be materially affected, there are alternate aguish and feverish symptoms. There is urgent thirst, the tongue is furred, and the urine high-coloured, depositing a lateritious or pinky sediment. There is great risk that these symptoms will soon be followed by decided indications of the formation of an hepatic abscess." 31.

These cases rarely require or bear strong depletion. Leeches or cupping are all that are, in general, proper.

"In puro-hepatitis, no time is to be lost in endeavouring to produce salivation; an effect of mercury which is the more satisfactory, as proving that the cure is within our reach. For in cases in which abscess exists, although the mouth sometimes becomes ulcerated, under the use of mercury, true ptyalism does not take place.

Calomel is the usual form in which mercury is prescribed in this disease in India; this preparation in large doses being generally considered the most rapid in producing the constitutional effects of the medicine, and it has the advantage of not acting as a purgative when taken in large quantities. The ordinary method in puro-hepatitis is to administer calomel in scruple doses alone, or in combination with opium or hyosciamus, every six or eight hours; mercurial ointment being, at the same time, rubbed in on the thighs or abdomen." 46.

III. Chronic Hepatitis. This is the disease which comes more frequently under our attention in this climate. The following is the brief symptomatology given by Mr. Bell.

"*Symptoms.* The symptoms proper to this disease, in whatever portion of the coat of the liver it is situated, are weight, and a feeling of fulness in the right hypochondrium; shiverings, and occasional and irregular feverish attacks, with heat of skin, and thirst; a foul brown or white tongue, with prominent papillæ; the pulse is generally hard, but not much accelerated; an increased and unhealthy condition of the biliary secretion; irritability and derangement of the stomach and bowels, and not unfrequently dysenteric symptoms; a sallow or jaundiced skin; urine scanty and high-coloured; pain over the right clavicle, or in the direction of the right scapula, with inability to lie comfortably on the left side; sleep disturbed." 68.

In respect to treatment, it may be remarked that topical bleeding is generally necessary, and that repeatedly, together with blisters to the side. The bowels must be constantly attended to; and mercury must be slowly introduced until slight ptyalism is induced. The other means recommended by Mr. Bell are those in general use,

Many judicious observations are made on functional disorders of the liver —on jaundice—disorders of tropical valetudinarians—diseases of children, &c. for which we must refer to the work itself. We cannot say that in this volume, Mr. Bell has taken such a commanding attitude for originality as in his Essay on Cholera: nevertheless the publication will be very useful, especially to those who are about to embark for our tropical possessions in the East.

X.

THEORETISCH-PRACTISCHES HANDBUCH DER GEBURTSHULFE, VON *L. F. Froriep.*

A MANUAL OF THE THEORY AND PRACTICE OF MIDWIFERY. By Dr. *Froriep.* Weimer, 8vo, pp. 546.

THIS is a very able compendium of the theory and practice of midwifery, and forms the text-book in a great part of Germany, as Denman's Introduction and Burn's Principles have for so many years in this country.

Already it has passed through eight editions since it was first published at Jena in 1802, and the present one, which now lies before us, is the ninth, and has been considerably enlarged and very carefully improved. The perusal of it has given us much pleasure on the whole, and has communicated here and there an interesting and instructive observation. We are glad to find that the practice of this branch of medicine is conducted by the German accoucheurs upon the same simple and scientific maxims which have been almost uniformly adopted of late years in this country. Formerly the doctor was too officious, meddling with, and often interrupting a process which Nature designed she alone should accomplish. In the vast majority of cases, no assistance is required from art; the attendant is, or at least ought to be, rather a spectator than an operator;—his presence indeed may do much, but more by soothing and encouraging his patient, than by giving any direct assistance. A mildness of manners, a suavity of speech, and a minuteness of attention, are the duty, and, we trust, also the pleasure of every one, who attends the sick-room in "Nature's sorest trial."

It is by no means our intention to analyse the present work; indeed its very

nature precludes such an attempt. All that we propose to do is to select such passages as appear to be interesting from their novelty or importance.

The extreme circumstantiality of our German friends is sometimes not a little amusing; for example, in speaking of the requisites of a "birth-helper," or accoucheur, our author tells us that he should have a neat, well-proportioned arm, soft sensitive fingers, the nails being kept short and well pared, and that gloves should be much worn, and handicrafts of every sort be avoided. A considerable dash of the "savoir faire" is also very useful to an obstetrical physician.

We must pass over the section on the history of midwifery with the remark, that those who are interested in it will here find a most copious and accurate list of all the authors who have written on the subject, from the Bible down to Dr. Gooch!!

Indeed, throughout the whole work, at the end of each section, is appended a catalogue of the best books for reference. This is an excellent plan, and well deserves imitation in this country, although we much fear, judging from the character of most of the works which of late years have issued from the British medical press, that few are capable for the task. Our authorship has been, and still is, far too superficial, shewey, and ephemeral, fitted more for private ends than for general good;—it has received a stamp from the prevailing manners and literature of the day; light and pleasant for a time, but without the solidity and reasoning of the writings of olden times. If Sydenham or Mead could be present at the medical conversaziones of the nineteenth century, how astonished would the worthies be;—confessedly outshone in all the soft and delicate elegancies of court-physicianship, they might in vain enquire, where are the classical erudition, the fruits of patient inquiry and of deep thought, and the simplicity of manners gone? "Tempora mutantur!" and we hope "mutabuntur."

What the English physicians of former days were, the physicians in Germany are at the present moment. They are hard-toiling, and deep-reflecting men; and we delight to honor them as such.

The description of the structure of the placenta is nearly the same as what has been usually adopted in this country since the time of the Hunters; a fœtal, and a uterine portion are mentioned, and these are said to be intimately connected and interwoven with each other, but not to have any direct communication; the blood in the one part being surrounded by, and, as it were, bathed in the blood of the other; but still there is no admixture. Our author merely alludes to the researches of Dr. Lee; at the period of the publication of his work, he had not been able to procure a copy of the Philosophical Transactions. It is asserted upon the authority of Osiander, that the umbilical arteries have a pulsation independent of the heart of the child. Having treated of the various peculiarities of the fœtus, the author alludes to those degenerated structures, which are known by the name of moles. Every true mole is the result of a blighted ovum; but most improperly the term has been given to other formations, which are quite independent of conception. The structure of moles differs greatly; there is the bloody, the watery, the windy, the vesicular or botryoidal, the fleshy, the calcareous mole; and in some we find air, skin, bones, and other debris; these last have been called "molæ dissimulares."

We must pass the subject of labours, the German arrangement being confused and useless.

The term "nosology" is little heard of now; we shall not enlarge further upon this topic, but return to our task of gleaning. Most of the diseases incident to lying-in-women are succinctly described; among these is one which has attracted less attention from us than from our continental brethren, and therefore deserves a few words en passant. The uterus after delivery sometimes does not contract itself into a firm round ball, and descend into the cavity of

the pelvis; but remaining flaccid and extended, the fundus becomes bent, or turned downwards and forwards against the os pubis; this constitutes the "anteversio uteri." The usual exciting and predisposing causes are general or local weakness, excessively prominent or pendulous abdomen during gestation, cramp, great irritation in the vagina, &c. When this accident occurs severe pain is felt behind the os pubis, and stretching down along the inner part of the thigh, the lochia are stopped, and general febrile disturbance ensues. In many cases the mischief has not been suspected during life, and ascertained only by dissection.

Moeller, Siebold, Horn, and Brunninchausen have written most accurately upon this disease. In the examination of the womb, whether during pregnancy or not, the Germans recommend, as a general rule, that the woman should be standing; lying on the side in bed, or as they call it, the "English position," is well suited only when the os uteri is placed somewhat obliquely.

We find that Dr. Froriep, like most of his countrymen, entertain very different opinions on the cases in which the Cæsarian operation ought to be performed, from those held by British practitioners. With the latter, it has been an almost invariable rule to decline this formidable resource, if delivery can, by the destruction of the child, be procured "per vias naturales." Now we know that in a pelvis, whose short diameter measures only an inch and three quarters or even an inch and a half, and whose long diameter is 3 or 2½ inches, the crotchet may be used to extract the child. True it may be, that the life of one being is thus inevitably sacrificed; but such are our feelings on the subject, and such we should wish to be those of the profession, that we assert, that the life of a mother, that character at once of the dearest affection and of the most momentous responsibility, ought never to be brought into imminent, nay we might even say, hopeless danger, for the chance of saving that of her unborn offspring.

But the same scruples do not seem to influence the conduct of the Germans; with them, it is a common step to resort to the Cæsarian operation, whenever they have satisfied themselves that the fœtus, if alive, cannot be brought through the passage, in consequence of any deformity.

It is well known to our readers, that, in order to avoid the horrors of gastrotomy, a proposal was made about the middle of last century, by Dr. Macaulay, to induce premature labour, at a period of gestation when the fœtus was so small as to be able to pass through the contracted pelvis.

Hitherto this operation, although performed repeatedly in this country with most gratifying results, has been denounced both in France and Germany; surely our Gallic brethren's prejudices do not arise from the dictates of a fastidiously-rigid morality; and with regard to the reluctance in Germany, we believe that is owing less to this cause than to incorrect notions of the dangers of the operation. If gently and judiciously performed, it is alike easy and safe; and truly it is unfair to condemn any proposal, merely because, in a single case, the result was not so satisfactory as could be wished.

The scruples against it are now, however, abating considerably, although still we are enjoined by Dr. Froriep, "not to dare to undertake the operation before the end of the seventh month." Several methods have been followed by different practitioners. Some, after gently dilating the os uteri, perforate the membranes with a trocar, and thus permit the water to drain off gradually; the pains of labour generally come on in from 24 hours to the fourth or fifth day after; others satisfy themselves by introducing a piece of sponge into the os uteri, and leaving it there until the womb begins to contract;—Dr. Conquest recommends that, with the forefinger, we should gently detach the deciduous membrane from its adherence round the cervix uteri. Whatever method we prefer, it is necessary to keep in mind that both mother and child (if the latter is born alive) require especial care and attention afterwards.

Here we must close our brief notice of Dr. Froriep's practical and most useful work; our wish has been, as stated at the beginning, only to glean some of the more interesting observations. It contains a mass of excellent instruction to the obstetrical student, and of important reference to the advanced practitioner. The matter is better than the arrangement; the theory and practice of such a scientific art as midwifery ought to be studied together; they cannot be dissociated. Who would ever think, in a course of lectures of describing the symptoms of every disease in a nosological code, before explaining the treatment of any? Yet akin to this is the plan pursued by our author. Our parting words, however, must not be those of censure; the faults are few, and may be easily corrected—the merits manifold and distinguished.

XI.

Considérations Pratiques sur les Neuralgies de la Face, par M. *Halliday*, Docteur en Medicine, des Facultés d'Edimbourg et de Paris. 8vo. pp. 170.

It is only within the last fifty or sixty years that the attention of medical men has been properly directed to the study of those most painful affections of the nerves, known under the title of neuralgia, tic douloureux, trismus dolorificus, &c. We find, indeed, allusions to them in some of the older authors; but these are indistinct and imperfect; and it was not until André, of Versailles, and Dr. Fothergill, of London, about the middle of last century, wrote their interesting papers, that the disease was recognized as a legitimately idiopathic and independent member of the nosological catalogue.

It had been confounded with rheumatism, gout, cephalalgia, toothache, &c.; physicians seeming to have forgotten, or never to have been rightly aware that the nerves, like all other parts of the body, may be originally involved in morbid action, as well as suffer sympathetically.

In the consideration of neuralgia, it is of first-rate importance to keep this remark steadily in view; the accuracy of our prognosis must, in a great measure, rest upon it, and the success of our treatment be thence materially affected. As the main value of Dr. Halliday's monograph consists in the valuable cases which he has assiduously collected together and arranged, we shall present our readers with some of the most interesting and instructive of these, and then cursorily glance over the second part, which is devoted especially to the detail of the various proposals which have been made for the relief of this truly dreadful, and sometimes incurable affliction.

Case 1. A merchant at Rouen, 65 years of age, had suffered more or less from excruciating darting pains in the eye-ball, cheek, nose and gums, for eight or nine years. At first they lasted only for a moment; a sudden flash of agony, and then over. They were more frequently felt in the evening than at other times. They gradually became longer, and returned more often: and for three successive months in one year, the patient had little respite. Most

of his teeth had been extracted, but all to no purpose. Subsequently to this dreadful attack, the paroxysms had become more severe, and frequently lasted for eight days at a time. In Summer he suffered much less than in Winter. The disease gradually increased in violence, and left the poor sufferer little respite; for days together he had sometimes not two hours perfect freedom; and the horrid stabs which at first lasted only for a second or two, continued now for several minutes. It seemed as if all the nerves of the eye-ball were torn asunder; the pain sometimes darted from the eye-brow to the top of the head; but the seat of the pain was not always in one part; but was in this twig one day, and in that another. A great variety of remedies were used, but all in vain. He then applied to a physician at Rouen, who recommended the use of the magnet. He immediately experienced relief from its application. The pain was assuaged as by a charm, and left only a feeling of numbness in the part. The patient carried the magnet constantly with him: it was of such a power as to raise a weight of six pounds. During a full twelvemonth the patient had comparatively great comfort; but after that his enemy threatened to return with its former violence; the paroxysms were, however, always mitigated but not subdued by the magnet. The history of this case ceases abruptly here.

The branch of the ophthalmic nerve, which is the most, or at least as frequently affected as any other, is the frontal, or supra-orbital. The external twig, which supplies the forehead, generally suffers; sometimes, however, although rarely, it is the internal, or that which is dispersed on the inner canthus, frontal sinuses, and lacrymal gland. The following is an example of it.

Case 2. A female, aged 33, while affected with catarrh, exposed herself to a current of cold air. In the course of a few hours she experienced an intense pain over the left frontal sinus, darting and shooting through the orbit with electric violence; the eye throbbed vehemently, and the tears which flowed were burning to the cheek. The paroxysm lasted for several hours, and then gradually abating, left her entirely free until the following morning at the same hour.

Emollients, opiates, and local bleeding, were of no use; and the patient of her own accord took some very strong coffee, as she had heard of its utility against migraine. The attack upon that day was less severe; and by continuing the coffee for some time she gradually recovered. She remained free of her nervous enemy for four years; it then returned after much mental distress. Again she had recourse to her coffee, and derived equal benefit as before. On the following year, in the cold month of November, it came back once more; and now, unfortunately, resisted the use of coffee, and also of opium, bark, and many other medicines. Slight relief was experienced by drinking copiously of warm diluents.

A similar case is reported by Dr. Fothergill: it occurred in an elderly lady, whose health in other respects was good. Hemlock gave her more relief than any other anodyne. She continued to suffer from her tormentor, to the day of her death. Van Swieten has related, in his Commentaries, several good cases of frontal neuralgia; he knew the efficacy of the cinchona bark, when the paroxysm was periodical.

The nasal twig of the ophthalmic is occasionally the seat of the pain.

Meglin, in a very excellent memoir, published in 1816, at Strasbourg, gives a case in illustration. A peasant, after a fit of violent passion, was seized with an intense pain in the right upper eye-lid, darting thence to the nose. It came on regularly about seven o'clock in the morning and lasted until noon, when it ceased, but only to return on the following morning about the same hour. The cinchona was given for three or four days; but it quite failed, and Dr. M. prescribed the following pills, which effected a perfect cure.

℞. Extracti hyosciami,
——— Radicis valerianæ,
Oxydi zinci sublimati, āā. ℈ii.

In pil. mediæ magnitud. dividend. The dose to be gradually increased from two or three to ten or twelve, morning and evening.

When neuralgia affects the dental twig of the superior maxillary nerve, the patient, as well as his medical attendant, is apt to suppose that the pain proceeds from a diseased tooth, and although it may be sound to all appearance, it is extracted, with no relief to the suffering. This error has been, and still is, so repeatedly committed, that we earnestly advise our readers to consider the following cases, which are published by Dr. Halliday. In 1793, a farmer was annoyed with toothache on the right side of the upper jaw; the teeth were sound, but the gums were redder than natural, and the cheek somewhat swollen. A dentist, who was consulted, upon finding that one of the back teeth, though sound, was tender when touched, recommended its extraction, as he thought it probable that the fangs might be diseased. The patient submitted, but the pain raged as much as ever. The dentist proposed to cauterize the socket; this was done, and the agony increased. By soothing topical remedies, partial relief was obtained for a time, and again the horrid sufferings returned. His life was so wretched, that in the agony of his pain he committed suicide. The particulars of the preceding case will be found in a brochure published by that intelligent dentist, M. Duval, of Paris. A similar and equally severe case occurred in the person of a lady, who at the time she consulted M. Meglin, had had nine of her teeth successively extracted; after each operation, except the last, the pain had ceased immediately, but returned at different times. She had moreover tried a great number of remedies, but without avail. M. M. ordered the pills of the extracts of hyosciamus and wild valerian, and of the white oxide of zinc. In the course of three weeks she was cured, and has had no relapse.

Professor Leydig, of Heidelberg has written an interesting report of a very severe case of infra-orbital neuralgia. In 1793, a musician, whose health had previously been very good, was seized with an intense pain, beginning in the occiput and extending round the head to the frontal region. So violent was it that the patient was forced to throw himself down on the bed, and remain quite motionless till it passed over. The intervals between the paroxysms were at first nearly three weeks; but gradually this period contracted, and the fits seized him every day, and sometimes twice in 24 hours. For several years he was a martyr to these cruel sufferings; all means, including cinchona, that were tried, had failed. He caught an ague, and bark was freely given; the ague was cured and so was the neuralgia, at least for a year or two, for then it once more returned: the act of sneez-

ing, blowing the nose, speaking, chewing, shaving, &c. brought it on; and the stabbing and tearing pains were accompanied with convulsive twitches of the muscles of the face, and with weeping of hot tears from the eyes. Towards the middle of 1800, the patient was more afflicted than ever; for now the paroxysm came on spontaneously, and seemed to be independent of any movements of the mouth or jaw. The pain commenced about the root of the right upper canine tooth, which during the paroxysm was so excessively sensitive, that the gentlest touch even of the tongue against it, caused an insufferable pang, which shot like lightning through the lids and globe of the eye, the right side of the nose, and cheek; the muscles of these parts were convulsively twitched, and the mouth drawn to the affected side. Each paroxysm usually terminated by a copious flow of mucus from the nostrils. An experienced physician tried the effects of almost every medicine in the Materia Medica; many seemed to afford relief for a time; but the respite thus obtained was short and delusive. One year he took the waters of Wisbad for eight weeks; and certainly derived benefit from their use; on the next year they quite failed. In 1804, his sufferings were, if possible, still more agonizing; for the pain now shot up along the forehead to the hairy scalp; the eye was rolled outwards, and the poor patient described the torment as if hooks had been plunged into the eye, and they were dragging it from the socket. The left side of the face, which hitherto had been exempt, was now affected with convulsive movements, and the sense of hearing had become much obscured. The slightest touch of the nose, cheek, ear, or right side of the neck, the odour of vinegar, or any volatile aromatic, the least breath of wind, the vibration caused by musical instruments, would frequently induce a paroxysm, or add much to its severity, if it were on.*

Some days the patient escaped altogether; while, on others, he had not fewer than a hundred paroxysms in 24 hours. In cold, clear weather, he was much better than when it was warm and damp. Each paroxysm lasted usually for about a minute, and terminated by a flow of tears and by a discharge from the nostrils; if this did not take place, the paroxysm was immediately repeated. Carrying on the history, we are told that, in 1805, the patient suffered even yet more dreadfully than before; the pain now extended to the palate, velum, and back of the throat; for five months he had not one hour of calm sleep. His general health had suffered greatly, not only in consequence of the acuteness of suffering, but also from the use of immense doses of opium, which he was in the constant habit of taking.

Leydig advised him to submit to the division of the infra-orbital nerve; and the operation was performed on the 22d of June. The nerve was freely and fairly cut across, and the knife drawn firmly along the bone, in order that no filaments might escape. For several days after, the patient experienced a few atacks of pain; but these were now infinitely less severe, and the ultimate result was most gratifying.

At the date of the report, 13 months after the operation, the patient remained well and free from any return; only during Spring and Autumn, (which were the seasons when he used to suffer most severely) the right side

* There thus appears to be a sort of resemblance between the phenomena in violent neuralgia and some of those of hydrophobia; the horribly exquisite sensitiveness of the skin to the gentlest impressions is a striking feature of both.

of the face was exceedingly sensitive to any impression. The painless, convulsive twitches of the left side of the face, and the anæsthesia of the upper lip and wing of the nose, on the other side, still continued.

Hitherto, our attention has been occupied with the nerves of the first and second divisions of the fifth pair, and now we arrive at the third, or inferior maxillary nerve. The twig most frequently affected is the mental; sometimes, however, it is the gustatory, and, at other times the small branches distributed to the masseter, pterygoid, &c. muscles. Such cases are not uncommonly confounded with neuralgia of the portio dura.

An old man, for eight years before his death, suffered from paroxysms of dreadful pain in the right side of the tongue; these were often brought on by the slightest movement of it, as in speaking, chewing. The pain was so agonizing, that the face was distorted with convulsions. The oxyde of zinc, taken internally, and also sprinkled on the tongue, afforded him some relief. In two similar cases, reported by André, cures were effected by cauterization.

Neuralgia of the Portio Dura.

It is a mistake which has been long, and still is, committed by many good authors, to suppose that the facial nerve is the most frequent seat of tic douloureux. MM. Boyer and Delpech first pointed out the inaccuracy of this doctrine; but, even according to them, it is more frequently affected than present experience warrants us in believing. Simple and primitive neuralgia of the portio dura is very rare. Dr. Halliday has not been able to find more than four or five examples of it, among the numerous authors he has consulted. M. Ribes, in the second volume of Majendie's Journal of Physiology, has narrated one. The pains were most excruciating, and, in the course of a short time, they began to affect the organs of digestion, and induce vomiting, so that nothing could be retained on the stomach. The patient was cured by quinine. In another case, which also occurred in a female after severe mental distress, benefit was derived from the exhibition of belladonna, and the hyperoxymuriate of potass. In a patient of Pelletan, at the hospital of the School of Surgery, the disease seemed to have been caused by the injury of some small twig, during arteriotomy at the part. The cautery was used, but failed, and the patient left the hospital.

Mr. Waton, in the Journal of Medicine and Surgery for 1793, has reported a very instructive example. A young military officer, of a healthy constitution, had suffered for a year and a half from repeated attacks of agonizing pain in the situation of the portio dura, and extending across the cheek, and upwards to the eye, so that these parts were drawn into frightful spasms. A dry and constant cough also harassed him greatly. The paroxysms of pain were often brought on by the slightest motion of the parts, by an inconvenient attitude, by a noise, or any other trifling cause which disturbed him, and had so affected the health, that the patient was extremely emaciated, and nervous in the highest degree. Often was he afraid to eat, in case his tormentor should seize him.

This patient had suffered repeatedly from venereal affections, and M. W. was inclined to attribute his neuralgia to the virus still lurking in his system. He put him upon a mercurial course, and ordered warm baths at the same time. The friction of the unguentum hydrargyri was continued for

upwards of two months, and under this treatment a complete cure was effected.

Meglin, in his "Rech. et Observ. sur la Neuralgie Faciale," Strasbourg, 1816, narrates a case of neuralgia of the portio dura, in which his pills, of extract of hyoscyamus, of wild valerian, and of oxyde of zinc, were used with excellent effects. The patient was a female, and attributed her malady to long-continued suckling.

It is important to keep in mind that, in cases of neuralgia affecting the portio dura, the muscles of the face are much more subject to a convulsive twitching or trembling, than in neuralgia of the other nerves. The explanation of this fact is beautifully in accordance with the theory of its functions, proposed by Sir Charles Bell. Paletta, the Italian surgeon, has described a form of neuralgia which is not very common. He designates it the "neuralgie mastoidienne," from the pain being confined to the mastoid process and its immediate vicinity. The following ointment, rubbed upon the part every two or three hours, generally effected a cure.

℞. Unguent. althœæ..... ℥j.
Olei Succini..... ℥ss.
Calomel..... ℈j. M.

Having thus selected a few cases, to illustrate the characters of this very formidable disease, as it affects the different nerves of the face, we deem it unnecessary to follow our author through its history, and the minute description of its symptoms; but shall content ourselves with a few cursory remarks. We agree with him in considering, that the only rational arrangement of the different forms of this Proteian monster is twofold, viz. into those which are regularly periodic or intermittent, and those which are not so; and, secondly, into the purely simple, nervous, or uncomplicated, and the symptomatic, or such as are connected with organic disease, either of the nerve itself, or of some other part.

Some pathologists speak of traumatic, rheumatismal, gouty, inflammatory, metastatic, gastric, carcinomatous, and syphilitic neuralgias. We have no objection to this multiplied division as only indicating the importance of always attending to the constitution and temperament of our patients in the treatment of the disease; but the same may be said of every other disease, as well as of the one under consideration. We cannot, therefore, admit each as a separate species, but rather as a shade of a species, or as a variety. How important it is, on the other hand, to ascertain the periodical and idiopathic character, or the reverse, will appear from the very different results of our treatment in the two forms: in the former, it is generally satisfactory —but, alas! in the latter, it is often quite inefficacious.

The diagnosis of neuralgia, from rheumatic, gouty, or hysterical pains, is abundantly easy. The disease is more common in cold and damp, than in warm and genial climates; and in persons between 30 and 60 years of age than at earlier periods of life. The exciting causes are very manifold, and may be either external, as a blow, wound, presence of any foreign body, tumour, or ulcer—the exposure of the face to high heats, or to chilly damp winds—the application of very cold washes, and also of acrid cosmetics, &c., or internal, among which are enumerated the metastasis of gout, or of rheumatism, the venereal virus, the sudden recession of the exanthemata, the suppression of accustomed hæmorrhages, discharges, &c. The morbid

anatomy of neuralgia is, as yet, quite unsatisfactory, and perhaps it will always remain so in a large proportion of cases. Still, it is well worthy the attention of physicians to examine, by dissection, the state of the nerves, whenever they can do it. Cotugno says that he found an infiltration under the neurilema of the sciatic nerve, in one case; and other authors have told us, that the nerves which have suffered from neuralgia are red and swollen; but these appearances are by no means steady, and cannot, therefore, be admitted as the pathological character of the disease.

In the present time, we know as little of its real nature as of that of hydrophobia, or of epilepsy, or cholera, &c. The conclusion which Weisse has drawn from his experience is scientific and correct.

"Nervi autem duplici modo patiuntur: vel immediate, quando ab aliqua caussa ipsi afficiuntur; vel mediate, quando ab illa partes nervis vicinæ infestantur." And he adds: "Ad primum morborum genus prosopalgia pertinere videtur, quia præter dolorem faciei acerbum, nihil quod præternaturale habendum sit, in ulla parte deprehendimus. In ea faciei regione, quam dolor occupat, nec rubor, nec duritas, nec tumor conspicitur, et tamen dolor est vehementissimus, atque haud raro convulsiones musculorum sese adjungunt." 126.

We cannot, therefore, wonder much that the treatment of neuralgia is still often unsatisfactory, and in too many cases quite impotent; but, at the same time that we admit this, we are equally assured of the high importance of basing our "rationes medendi," as far as possible, on rigid inquiries as to the pathological state which may exist.

If symptoms of local fulness or of inflammatory action be present, (and the knowledge of this is easily ascertained by careful examination by means of pressure of the part, by the action of local warmth, and so on) the clear indication is, the abstraction of blood, and the best method by far of effecting this is by cupping; a quantity is thus speedily drained off, and an obvious impression on the vascular energies of the part is thus made at once; besides, the counter-irritation of the numerous wounds, and of the powerful suction, is of decided utility. A few brisk purges, and then a blue-pill or two, every night for a week, or two, with a dose of colchicum once or twice a day, will often succeed admirably well. When any accustomed discharge has been stopped, or any exanthematous disease been repelled, we must, as a matter of course, endeavour to recal these by appropriate treatment. In the latter case, some practitioners praise highly the decoction of the dulcamara. Sarsaparilla also is useful in such cases. We have known an emetic work a charm when other remedies had failed. The tartar-emetic ointment has been well spoken of by M. Fallot. If a syphilitic taint be suspected, a mercurial course may be necessary. A case in illustration has been reported from Masius.

When the paroxysms are distinctly and regularly periodic, cinchona or arsenic are by far the most potent means we can use. The doses must be large, often enormous before we succeed, and the use of the remedy ought to be continued for some time after the abatement or disappearance of the pain. A most useful adjunct to these medicines is some vegetable antispasmodic, as assafœtida, valerian, &c. &c. The subcarbonate of iron is well-known to be often an "heroic remedy." Hutchinson has employed it in not fewer than 200 cases of neuralgia, unattended with inflammatory symptoms, with great advantage.

As mere anodynes, hyosciamus, belladonna, stramonium, and opium, may often succeed in lulling the pain for the time; but we cannot expect to effect a radical cure with these poisons. The fetid gums, united with camphor, are sometimes very useful. Frank praises highly a combination of musk, calomel, and the golden sulphuret of antimony. The Plummer's pill may be a very good substitute. Naumann recommends strychnine in preference to all other medicines.

As to external applications, they may be useful, as affording some relief during the paroxysm; the croton and cajeput oil, strong æther, solution of camphor in spirit of turpentine, the extracts of belladonna and of stramonium have been occasionally used with advantage.

In our practice, the linimentum hydrargyri has sometimes been of decided utility; the part must be kept well anointed with it for a week or more. Electricity, galvanism, and acupuncturation have been praised by some, and condemned, as utterly useless, by others.

Magnetism of late has been again introduced as an omnipotent panacæa: we much doubt its efficacy in any severe case; still it is not fair to reject all testimony, merely because it does not tally with our notions a priori. The conclusion to which M. Thouret, more than half a century ago, arrived, is probably quite just. He says, "the effect of a magnet upon tic douloureux is feeble, although sufficiently real. It acts as a palliative, which soothes at least for the moment, the severity of the painful paroxysm. It is therefore to be viewed as a feeble remedy against a formidable disease. But amid sufferings, like those of the tic, no means of relief, however slight this may be, ought to be neglected, and as what is used one day with success may be useless on the morrow, we should thankfully receive any addition to the catalogue of our anodynes."

As to the operation of dividing the nerve, Dr. Halliday, without condemning it altogether, is not inclined to recommend it in many cases. His reasons are, that it is rare that only one branch of a nerve is affected;—that it is by no means easy to ascertain that all the fibrillæ are fairly cut through;—and that, even when they are so, re-union may take place, and the disease be thus re-established. This is not mere conjecture; but rests on numerous facts which have been published. In neuralgia of the portio dura, he thinks that it is quite inadmissible.

From the preceding analysis of this monograph, our readers will be able to judge for themselves of its merits; without any claims to originality, it presents the reader with a very correct and well-illustrated history of facial neuralgia; the symptoms, diagnosis, and treatment. Its perusal will amply repay the attentive reader, by leading him to the reflection that neuralgia, although it may always or generally exhibit the same leading phenomena, is very different in its nature in different cases, and therefore demands the greatest nicety of judgment for its appropriate treatment.

XII.

The Homœopathic Medical Doctrine, or Organon of the Healing Art; a new System of Physic, translated from the German of *S. Hahnemann*. By *Charles H. Devrient*, Esq., with Notes, by *Samuel Stratten*, M.D. Octavo, pp. 332. Dublin and London, July, 1833.

Having reviewed the original Work in No. XXXIII., for July, 1832, we shall dedicate but a very short space to a notice of the translation.

A very cursory glance at this work has convinced us that it is founded in the grossest errors that were ever attempted to be palmed on a credulous public, in the garb of solemn truths. The fundamental principle, or rather *falsity*, of homœopathy is, "that certain medicines, when administered in a healthy state of the system, produce certain effects, and that the same medicines are to be used when symptoms similar to those which they give rise to occur in disease." Now let us look at a few of the *facts* on which this doctrine is based. The homœopathists say that they experimented upon people in *perfect health*, and by this artful set out they think that they cannot be contradicted, except by a train of experiments similarly conducted—which very few will take the trouble to make—and which still fewer have done hitherto. But this manœuvre may not, perhaps, serve their turn. We would first ask the homœopathists, however, where they found people, *in perfect health*, willing to undergo a train of experiments which actually rendered them ill? It was probably on their own persons that the experiments were made—and it is very easy *then* to suppose that they turned out exactly as the homœopathists desired and expected! Thus, a disciple of the great "Organon" took a grain of sulphate of quina three times a day; and what was the result? Why, in the course of a few days, the *appetite* was lost—nausea set in—then cold along the spine—rigor—reaction—perspiration!! In short, a regular ague-fit was induced by ten or fifteen grains of sulphate of quinine, taken in the course of four or five days!!! Was there ever such a ridiculous statement laid before a learned profession! It is to be remembered that this was not an occasional occurrence in one or two individuals (which might happen if so much flour were administered), but the inference is evidently implied, that the above is the regular and constant effect of quinine! So that, if a student wishes to see an intermittent—not a very usual sight in this country—he has only to produce one by a few grains of quinine—and then cure it by the same remedy—verifying the exploits of the fabled spear, which always healed the wound it had inflicted! The truth is, that the general effects of quinine on the constitution are the very reverse of what the homœopathists have stated them to be. Under such doses as above, the appetite is increased—a sense of heat is produced, not coldness—and perspiration, as well as all the other secretions, are diminished. In this, as in all other cases, the homœopathists have singled out a miserable *exception*, and paraded it as the *general* rule—without exception! Were there ever such error and folly seen united before? Here, then, the premises being false, the inferences fall to the ground as nullities.

Again. To prove that "*similia similibus curantur*," mercury is brought

on the stage. Mercury cures syphilis; but the same metal "produces symptoms, *local* and constitutional, so closely resembling the poison of the lues venerea, that medical practitioners find it very difficult, nay, sometimes impossible, to distinguish one disease from another." Does the candid homœopathist admit that such effects of mercury are very rare, when we consider the number of people who take mercury—or that they occur only in particular constitutions, especially in those who have also the syphilitic poison lurking in their veins? Oh! no. The above effects are adduced as the general, the universal effects of mercury—*without apparent exception.* Among the ten thousand people to whom Mr. Abernethy administered the blue-pill, how many, may we suppose, had regular chancres (the local symptoms) produced by the mercury? We dare to say that there was not one! But to go from suppositions to realities. What analogy has the operation of mercury, and that of syphilis, on the human frame? None whatever. Mercury acts on the whole glandular system, increasing the secretions and excretions, producing, if carried to a certain extent, salivation. Does the syphilitic poison produce these effects? No. Besides antimony, sarsaparilla, and many other medicines, of opposite qualities, will cure syphilis. Nay, starvation and keeping in bed will do the same. Here, again, the homœopathic premises being *false*, the deductions are equally so.

Thirdly,

"Nitric acid is generally recommend in cutaneous diseases; the internal use of this remedy in a very dilute form, produces scaly eruptions over the surface of the body; and the external application of a solution, in the proportion of one part acid to one hundred and twenty-eight parts of water, will produce inflammation and ulceration of the skin. These observations would lead to the conclusion, that nitric acid cures cutaneous diseases by the faculty it possesses, of producing a similar disease of the skin."—*Preface*, v.

We verily believe the assertion that dilute portions of nitric acid, taken internally, produces scaly eruptions, is a mere assumption—or, if it ever happen, that it is, like the preceding facts, exceptions to general rules. In the East Indies, where diluted nitric acid used to be exhibited, on a large scale, for syphilitic affections, and as a tonic after bowel and liver complaints, we do not remember to have seen a single instance of the kind, so confidently trumpetted forth as a general rule by the advocates of homœopathy. As to the external use of the acid, what would the ghost of Scott say, if he were to rise from his watery grave in the pacific ocean? He who employed more of this acid to the feet and legs of his patients, than would float a three decker in one of the East India docks, has told us nothing of this homœopathic piece of intelligence!

Fourthly. Nitrate of potash, say the disciples of Hahnemann, *taken in small doses*, produces "frequent desire to make water, accompanied with *pain and heat.*" This is not a *fact*, but a fiction. It is a mere gratuitous assertion to preface, homœopathically, what is truth—viz. "when this state of the urinary system exists as a consequence of disease, or the application of a blister, a very dilute solution of the same remedy has been found beneficial." Here, again, the premises are *false*, and the inferences, though true, as to fact, are inconsequential as to doctrine.

Fifthly. We are told by the promulgators of the ORGANON, that hyoscyamus *ordinarily* produces "vertigo, delirium, stupefaction, and somnolency."

Here is one of the candid statements of the homœopathists! Hyosciamus, in poisonous doses, or in peculiar idiosyncrasies of constitution, may produce the foregoing effects—in the same way that turtle-soup may produce apoplexy, or wine insensibility. All medicines are poisons, when administered in inordinate doses, and the most wholesome food may destroy life, when taken to excess.

"The internal use of hyosciamus is followed by mental aberration, the leading features of which are jealousy, and irascibility. When these hallucinations exist, this remedy is indicated." *Pref.* vi.

Thus hyosciamus first produce jealousy and mental aberration—and then removes the same symptoms! This is blowing hot and cold with the same breath truly.

"Opium in general causes drowsiness, torpor, and deep sleep, and yet this remedy in small doses removes these symptoms when they occur in disease." *Pref.* vi.

What practitioner would think of exhibiting opium, in any doses, for "drowsiness, torpor, and deep sleep?" Here is another gratuitous assertion, not only without proof, but against all experience.

"Sulphur is a specific against itch; notwithstanding which, when it is administered to healthy individuals it frequently excites a pustular eruption resembling itch in every particular." vi.

"A mixture (says the translator) composed of one drop of hydrocyanic acid and eight ounces of water, administered in a drachm dose, has produced vertigo and anxious breathing. Vomiting has followed the use of the sixteenth of a grain of emetic tartar; narcotism the twentieth of a grain of muriate of morphia; and spirit of ammonia, in doses of one drop, acts on the system as a stimulant." *Pref.* vii.

Admitting the truth of the above statements, what then? Why, where one person experienced such effects, 999 would experience no effect whatever, from such doses of prussic acid, antimony, opium, or ammonia!

It is upon such facts as these that the new doctrine rests! It is difficult to imagine how a physician, in the 19th century, could gravely enunciate such a series of absurdities, errors, and downright falsities, as the basis of a doctrine that was to overturn all former observation, experiment, and experience! But it is still more wonderful that other physicians, in his own and in other countries, should have been led to adopt such preposterous notions. That homœopathy will ever take root in this country, we may safely venture to deny—except as a branch of trade to make money among our wise aristocracy, the patrons of St. John Long and his tribe! That money will be extracted out of the pockets of our gentry, by these fooleries, we have no doubt. It is not more difficult than the extraction of quicksilver from the heads of his patients, by the Harley Street Quack. Lords will be found to verify the cures of homœopothy, as easily as to certify the quicksilver extraction of Long. At the very time when we were drawing up this notice of the Organon, we were summoned to a patient who had been under the hands of one of the disciples of homœopathy, during two or three months, for the cure of an organic affection. The patient was furnished with a vial not near so wide as a common silver pencil case, and about one-fourth its length, containing more than fifty pills, scarcely the size of grains of sand.

One of these was to be placed on the tip of the tongue, twice a day, and there allowed to dissolve. The complaint continued unabated—and so did the doctor's visits every second or third day—without any charge however for the medicine, but only a common fee for his visit! It so happened, however, that the patient was seized with a severe bowel complaint; and cholera being apprehended, it was thought prudent to call us in, without saying a word about the homœopathist, who still continued his attendance, equally ignorant that another physician was employed. It was necessary to use very active measures, and even to make the mouth sore with calomel and opium. Afterwards, the secret came out. The homœopathist, when he found a new disease had supervened, thought it necessary to leave a new remedy, every day—a powder that required a magnifying glass to be distinguishable at all. The powders remained untouched, and when the patient was getting well, under the influence of mercury and opium, the doctor rubbed his hands, and, with a very knowing look, told the patient that, had she been under the care of some of the London physicians, all this time, her diarrhœa would certainly have turned to cholera, and death would have been the consequence. This wonderful homœopathic cure will, if successful, (for that is not certain,) make a figure in the next edition of the ORGANON.

In respect to the ORGANON itself, we have waded through the 292 sections of which it is composed; and such a tiresome tissue or jumble of unintellible gibberish, erroneous *reasoning* (God save the mark!), and transcendental balderdash, it was never before our hard fate to encounter! This is saying a good deal, considering that we have served an apprenticeship of some sixteen years to the noble art and mystery of viewing and reviewing, sifting and searching, weighing and winnowing, the productions of the medical press! Of the ORGANON, it may be truly said that there is "nil simile aut secundum," in medical literature. But, being a HOCUS POCUS of mysterious nonsense, we have little doubt that, for a season, it will prove a profitable engine in the hands of those who choose to work it to their own advantage. It is an admirable system for high-lifed humbug. The medicines are all secret—all to be furnished, prepared, and exhibited by the homœopathic doctor. The doses, too, are infinitely smaller than grains of mustard-seed, and have no other taste than that of sugar. All incurable diseases are to be removed or annihilated with certainty—"cito, tutè, ac jucunde." Need we say more? St. John Long and Dr. Morison may shut up shop. Their burning liniments and cholera-facient pills are all on the "*contraria contrariis*" SYSTEM, and, consequently, out of date. The Apothecaries' Hall—the great chemists—nay, every little chemist and druggist, must soon go on the parish, since the five-hundredth part of a grain of quinine will be a large dose—and a pint of BATTLEY will serve all London for twelve months! But to be serious:—If doctors can be such fools as to attempt the cure of *real* diseases by homœopathic remedies—and if patients can be such fools as to trust their bodies in such hands, why then they are fools on both sides. There will be plenty of "*similia similibus*"—but a woeful lack of the "*curantur.*"

Periscope;

OR,

CIRCUMSPECTIVE REVIEW.

"Ore trahit quodcunque potest, atque addit acervo."

I.

of the English Periodicals, and Notices of Engli Medical Literature.

UR ART IN TURKEY.

ents have drawn the atten- rope to the state of Turkey, anomaly of modern times, ted and unchristian empire, y the jealousies of civiliza- Christians. It is more than iat few years will elapse ere dants of Omar are driven e, and we watch their strug- with feelings akin to those perience when gazing on a

Our business is not with nsiderations, and we pass to ore immediately interesting s, the condition of our pro- he land of the Turk. It has with reason, that the female a more commanding sta- he progress of civilization; the Wigwam, they expand ses in the Café. It seems wise with doctors. In the Africa, the steppes of the nd the plains of Hindostan, an is received as a sacred is person is secure, his un- gotten, and barbarous rapine anaticism alike cower down ssuager of human woe.

ccurate and consequently a ting account of the state of and its professors in Turkey een published in Germany enheim, and is brought be- glish reader by Dr. Robert his gentleman, in contribut- Dublin Journal notices of

the more valuable modern Ger works, is doing a service to the pr sion that we feel great pleasure in knowledging. From this gentlem paper in the last number of our e lent Irish contemporary,* we shal tract such passages as we think particularly amusing or instructive ferring our readers for further de to our contemporary himself. scarcely necessary to observe that Oppenheim possessed great and p liar opportunities for obtaining th formation that he has now made pu

1. *Physicians in Turkey.* The m of making a good physician vary in ferent countries. In Turkey they formed as law-givers are with us, h ditarily. In America and France elsewhere, a prescribed course of m cal study, followed by prescribed minations, constitute the doctor. In gland the neophyte swears to the thi nine articles, and ruins his health his morals on the banks of a letha stream, where no medicine is taug and he too becomes a doctor. T we see that customs differ. But present business is with the heredi physicians of Turkey.

"The father of medicine in Tu was an Arabian, named Lochmann, pointed in the seventeenth centur Mahommed, to discharge the sa functions of physician. The mira performed by Lochmann were nu

* No. IX. July 1833.

rous, and tradition has recorded them in glowing colours: he was a wandering dervise, and taught his art to the brethren of his order, who, retaining to this day the precious secrets he revealed, continue by birth-right the practitioners of Turkey.* As might be expected, this religious order of physicians are greater proficients in superstition than in practical medicine, and except being acquainted with the virtues of a few plants, they absolutely know nothing. It is true, indeed, that they attempt to acquire confidence by appealing to supernatural agency, divination, astrology, talismans, and cabalistic figures.

Sometimes they attribute the origin of disease to the special wrath of God, in others to the interference of devils, but never perform the ceremony of deprecation or exorcism, without a multiplicity of rites and sufficient pay. Where money is given in the expected quantity, their prayers are endless, their beads are told *ad infinitum*, picked sentences of the Koran are sewn together and given to the patient to swallow; or when a fluid menstruum is preferred, the holy words are written with chalk upon a piece of board, this is washed, and the water with which the ablution is performed, forms a draught potent in proportion to its impurity. Amulets, however, form the favourite charm of the Turks, and over the whole of the east, Mahammedans,† Jews, and Christians, appeal to their protection, when threatened or overtaken by misfortune. Hence, few die without wearing two or three amulets, to whose safe guardianship they had intrusted their lives. They generally consist of a scrap of paper, containing a sentence from the Koran or Bible, embellished with cabalistic figures, and folded in a triangular shape, enclosed carefully in a little bag, and worn next the skin, either by means of a string hanging from the neck, or by being stitched inside the turban. Some amulets, supposed to possess a spell capable of protecting from ball and dagger, are sold at an enormous price."

We think that the Hohenlohës, Irvings, and St. John Longs, have something yet to learn. They have not made their patients swallow their prescriptions. The chalk-mixture is an excellent idea, and must not be confined to Musselmen. The unction with which devils are cast out being regulated by the quantum of the pay, is not without parallel in Europe. They who smile at the fanatic Turk, beguiled by amulets and snatches from the Koran, look complacently enough at the Christian fools, Lords, Baronets, and Countesses, who depose that quicksilver is extracted from their heads, gout from their feet, and water from their brains, at the bidding of a wretched painter. Nay, what is the religious charm held sacred by a people whose existence is the mere consequence of religious fanaticism; what is this, we say, when compared with the mummery of a magnetising needle amidst the most civilized people of the world? And who are they that will sneer at the Mahometan duped by the faith of his fathers, and read without a shrug a medical periodical gravely descanting on the effects of a magnet. Well has Lord Bacon remarked that, "in all times, in the opinion of the multitude, witches and old women, and impostors, have had a competition with physicians,"* and well did the ancient theogonists feign that Æsculapius and Circe were both children of the sun, that sun which Hamlet says breeds maggots.

The Turks, humbugged as they are, yet possess the sense, which some Europeans seem to want, of appreciating the effects of education and study. Accordingly a foreign physician, particularly a Frank, is highly valued, and greatly followed. This, in fact, has led to an abuse which a knowledge of the

* The Turks, with a happy knack of distorting Frankish names, have confounded Hoffman with Lochmann.—Thus Hoffman's liquor they call Lochmann-Rouch.

† The name of the prophet is pronounced *Mahammed*.

* Essay on the Advancement of Learning.

Frank character might easily lead one to suspect.

"The encouragement thus given to foreign practitioners, has generated the greatest abuses; for as there are no means of ascertaining the acquirements of strangers, many, induced by sordid views, embark on a system of barefaced quackery, and thus persons who have followed other employments at home, are suddenly physicians in Turkey. Dr. Oppenheim was invited to attend a consultation with an eminent French physician at Smyrna, who candidly told him, that the only preparation he had for the profession was, service in the army as drum-major! Among the staff-surgeons of the Turkish army, was a Maltese, who had been a letter-carrier at Corfu, and an Italian captain of a merchant vessel, who had been shipwrecked on the coast of Asia Minor. A Genoese gentleman, implicated in the late revolutionary attempts in Piedmont, and who had long served in the army, applied to Dr. Oppenheim, who gave him sixteen recipes, by means of which he was set up in the world, being soon afterwards appointed physician to the Governor of Jambul! Nothing can exceed the heterogeneous materials of which the mass of practitioners is composed; foreigners from all countries, and of all trades, but chiefly Greeks, Jews, and Armenians, the religious orders of all the different forms of worship that are professed in Turkey, besides gipsies, barbers, and old women. Of the foreigners, some are well educated, and a few whose names Dr. O. mentions, are excellent surgeons and experienced physicians, but such are "few and far between." It is a pity, that the state of medicine is so low in a country, where the inhabitants esteem so highly the medical art, and where all are inclined to respect physicians; by the Turks, a skilful physician is almost ranked as a saint, and the appellation "Hekim" is the surest protection against either religious or political persecution. In the last campaign against the Russians, often, says Dr. O., was the uplifted sword of the half-barbarous Turk, arrested on the cry of "Hekim" being uttered by his vanquished foe. The modern Greeks give the title of Excellency to the physician, and old Homer estimated the value of a good surgeon and physician very precisely, in saying, that he was worth half a dozen colonels!" *

There is a particular district of Greece, Sagor in the Paschalick of Janina, where the profession of medicine is the chief occupation of the inhabitants, whose right to practise is hereditary, and whose knowledge consists in recipes handed down from generation to generation. From three or four villages in this district, swarms of itinerant physicians annually spread themselves over the whole of Turkey. They are ignorant enough, as may readily be imagined. Jewish physicians also abound, and are fully as ignorant as they. They are medical pedlars, carrying wallets, and uttering in every public place the shrill cry of "ei hekim, ei hekim," *(a physician, a physician.)* When consulted, they feel the pulse, roar out—"bilirim senin hastalik," (I know thy disease) open their wallets, give a pill or a powder, and receive the thanks of the patient, with a fee of two or three half farthings. On this Dr. Graves or Dr. Oppenheim, we know not which, indulges in a few very ominous bodings.

"Knowledge came from the East, it has travelled slowly to be sure, but here it has arrived at last, and lo! our fees, formerly paid in gold, are *changed* into silver, and undergoing the rapid process of depreciation, the distant tinkling of brass may be heard even now by the ear, practised in the sounds of coming events."

Such a "depreciation of the currency" would be melancholy indeed, but let us hope that the day is yet distant when the fashionable doctor will, after a hard day's work, pull out his coppers, and murmur at the illiberality of Lord E. in not inclosing the customary farthing.

* "It is difficult to assign their proper rank to many of the chiefs and minor heroes of the Iliad. In calling them colonels, I mean no offence to the dead."

In Turkey every thing is learnt by the pulse, and by the pulse every thing is determined. In this country there have been "Water Doctors," who were paid, and who prognosticated, and prescribed by the chamber-pot. If Sterne be in the right when he declares that "there are worse occupations in the world than feeling a lady's pulse," the Ottomans have the advantage of us. With them a physician is made or marred by his dexterity in applying his fore-finger to the radial artery. The governor of Adrianople, Halisch Pacha, once visited the tent of the Russian General, Paulin, where Dr. Oppenheim and two other physicians were attending at levee. Each of the three successively was presented to the Pascha, who made them feel his pulse; and when the ceremony was over, he immediately declared, that one of them was imcomparably a better physician than the others, for, said this wise Pascha, he felt my pulse much better! With us, a pet doctor gets his reputation the Lord knows how! Whether such things occur in Christendom as bribing ladies' maids, we cannot say, but the Greek physicians fee the servants to inform them of their masters' and mistresses' *motions*, and subsequently declare them to the astonished patient, on examination of the pulse.

When the physician, by means of the pulse, has declared the precise nature of the disease, and the exact moment of its termination, the Musselman requires him to give a certain medicine, to have some particular effect in determining some evacuation, which is to prove critical. No medicine gets the least credit, or in their eyes can be the least effectual, unless it produce sweat, urine, or purging. The Turk is fond of large doses, too, in order to produce more decided crises, and he always prefers medicine in the shape of a draught, or rather drink, (sherbet.) He dislikes emetics, and nothing will induce him to allow the exhibition of an enema. It is quite vain to endeavour to make him alter his diet; of this he cannot conceive the use. In the Month of May, it is not unusual for them to submit to what is termed the spring cure. An active purgative is first taken, and afterwards the expressed juice of various plants, such as taraxacum, various grasses, &c. are taken daily, along with a drink of whey. The most favourite purifier of the blood, however, is *viper broth*. The most esteemed vipers are caught in the neighbourhood of Adrianople, and are sent thence in great numbers to Constantinople, and other parts of the empire. They are kept in wooden vessels, and when wanted for use they are drawn out through the bung-hole. It is needless to remark, that this operation requires much caution and skill, in spite of which, as happened in an instance which Dr. O. himself witnessed, the poor apothecary is sometimes bitten. The bite often, but not always, proves troublesome, or even fatal. When this dangerous article of the materia medica has been safely extracted from the vessel, his head and skin are instantly taken off, and the animal is cut into thin slices, which are boiled with water to make broth. The most effectual of the means employed either for the prevention or cure of diseases by the orientals, is the bath *(Hamam.)* The long continued frictions employed, the stretching, drawing, kneading of the limbs and flesh, the pulling and working of the joints, &c., all tend to exercise a healthful influence; it is astonishing, what a command over the joints an experienced attendant at the baths possesses. He twists them in every direction, and you almost feel, as if he had performed on you a number of successive dislocations and reductions, following each other with surprising rapidity. In chronic diseases of the skin, gout and rheumatism, these baths are invaluable.

The baths are splendid in conception and construction, so cheap as to be accessible to the poorest Turk, and form for the ladies a good equivalent for morning concerts, or morning calls. We may refer the curious to the modest letters of Lady Mary Wortley Montague.

2. *Fees in Turkey.* The sick Turk, like the sick devil, makes promises: the convalescent Turk, like his proto-

type, breaks them. In consequence of this disposition, the physician is often obliged to draw up a specific contract in writing, and according to a legal form, before he undertakes the treatment of a case or the performance of an operation. The contract is deposited in the hands of a magistrate, who can enforce payment, and whose zeal in the discharge of this duty is quickened by the legal fee of ten per cent., to be deducted from the stipulated sum. It is not very rare, however, for the patient to evade the ends of justice, by paying the magistrate twenty per cent; when this is done, the physician's contract too often turns out to be waste paper. These contracts, however, in general afford the physician tolerable security, and are especially necessary when capital operations are performed, as without them he may lose not merely his fee, but his life, in case his patient dies, for the Turk considers the knife of the surgeon in the light of a weapon wielded by an enemy, and thinks himself called on to avenge the death of a relative after an operation. This is hard enough upon the poor surgeon, who, to avoid more fatal consequences is often obliged to pay blood-money to appease the wrath of relatives. To avoid these consequences, the surgeon and one of the nearest relatives of the patient repair together to the *cadi*, if it be a small, or to the *mufti* if a large town, and obtain from him a *protection* (fetwa,) by which the surgeon is secured against all persecution if the patient dies. Dr. Oppenheim, himself, felt the force of this Turkish antipathy against the performers of unsuccessful operations. After the battle of Monastir, on the 24th August, 1830, he amputated the leg of a wounded Deli:* the Deli died. In a few months, Dr. Oppenheim was sent by the Grand Vizier to inspect recruits at Pristina, and was invited to the house of the *Cadi*. This honest functionary having been assured that the Doctor had operated on Soliman Aga, the deli, said—"you behold here the father of Soliman-Aga, who claims blood-money from you, which money it is most just you should pay him." Dr. Oppenheim, being protected by the Vizier, soon brought the Cadi to reason.

"When a physician has treated a patient who dies of internal disease, he incurs no risk, unless the deceased held some important and lucrative government post; in such cases, the relatives and dependants of the deceased, being deprived by his death of their station and emoluments, are apt to wreak their vengeance on the physician, who, however, generally takes care to be out of the way on such occasions. At other times, medical men are employed to give opinions, concerning not the living, but the dead! This may appear strange, but it is the fact, and it is for such opinions that they are sure to be best paid, for they have it in their power to make what conditions they please with their employers. In Turkey, whenever a governor of a province, or mufti, or any other *employé* of the government dies, the whole of the treasure in his possession immediately finds its way into the coffers of the state, therefore, it becomes an object of paramount importance for the family, to conceal, if possible, the death of their relative, until they have either made off with his money, or what is a safer method of proceeding, until they have used one portion of it to bribe the members of the divan into conniving at their keeping the remainder. The father of the present Pascha of Uskup, it is now ascertained, was buried four years before his death was announced. During the interval, his son had carried on all the public business in the father's name, and the signature of the latter was affixed to all official documents. During this period, medical advice was sought for in all quarters, and eminent physicians were even brought from Constantinople. They were consulted, but for very evident reasons, were never permitted to see their patient, a matter es-

* The Delis form the flower of the Turkish cavalry, and their name means *madman*. They are so called from their frantic impetuosity in battle.

teemed of little consequence in Turkey, provided the state of the pulse is accurately described."

3. *Apothecaries in Turkey.* These require no Act to bother a Turkish Divan, for this simple reason, that there are none. Indeed there are no shops for the sale of medicine, except at Constantinople, and one or two other large towns. Every physician mixes his own medicine.

4. *Poisoning in Turkey.* No restraints being placed upon the sale, poisoning both by accident and intention is too common. Sometimes medicine is weighed in a scale still soiled with corrosive sublimate or arsenic. Often the ignorant practitioners prescribe powerful medicines in poisonous doses. The writhings of the patients are then interpreted as symptoms of being possessed, and forthwith the Turkish dervise and the Christian Priest are in requisition, and proceed simultaneously with their different forms of exorcism. The precaution of having recourse to the rites of two different religions, is taken to avoid the possibility of mistake or failure, for, say they, we cannot, *à priori*, tell whether our friend is possessed by a Mahammedan or by a Christian devil.

Poisoning by design is still more frequent, and the physician too often the venal instrument of murder. The Turk thinks it no sin to poison an enemy, and for two reasons:—If you do not poison him, he will poison you; and besides, you cannot poison him if he is not fated so to perish. And this is the "brutal and bloody" Empire, that christian jealousies allow to pollute the fairest portion of Europe. The following and concluding extract will put this dreadful laxity in moral principle in a striking point of view.

"Melancholy, as it is," says Dr. Oppenheim, "to witness such mischievous misinterpretation of a Mohammedan dogma, it is still more melancholy to see persons who profess Christianity engaged in the same guilty course, for it cannot be denied that too many of the native Christians of the Greek Church are willing agents upon such occasions. In truth, no honest person ought to engage himself as domestic Physician to any great man in Turkey, for if he be called on to poison, and refuses, it may cost him his life. Of this I myself had a convincing proof. The late campaign of the Turks against the Albanians was brought to a successful conclusion, not by superior courage, numbers, or discipline, but by craft and treachery. Two of the most powerful foes of the Sultan, Whely-bey and Asslan-bey, surnamed the Lion Chief, were invited during a truce, to witness a review of the Turkish regular troops, which to them was a matter of great interest and novelty. The Vizier had it so arranged that they were both shot dead as they were passing in front of one of the battalions. The Vizier's son, Emin, Pascha of Janina, ensnared and despatched some of his most formidable opponents in a nearly similar manner at Janina. One evening at levee, the Grand Vizier made a sign for me to remain, and when all the courtiers had left the room, he ordered in coffee, pipes, and a chess-board, and I then found myself alone in company with a man who expected and received unconditional obedience from every one of his attendants, and at whose nod more than one hundred thousand heads had fallen. Having signified that I should be seated on the divan, he smoked, but according to etiquette, I left my pipe untouched; and when we had made a few moves at chess, he raised his head, looked fixedly into my eyes, and said 'Hekim-Baschi, I have enemies, you can and will assist me!' He then made the sign for me to retire, which of course precluded the possibility of my replying. I made my obeisance, and rode home greatly agitated and alarmed, for the meaning of the Vizier's words was but too intelligible. At that time I was attending two Albanian Chiefs of note, who were afraid to trust themselves to the care of the Vizier's physician, and who had applied to me as an officer of the staff for advice. The Vizier was aware of this, and wished me to despatch my two patients. I revolved in my mind the dif-

ficulties of my situation, and saw no other method of escaping than by making large pecuniary sacrifices, in the way of bribe, to the Vizier's avaricious *Seraff*, (Pay-master,) and his *Grammatiko*, (Secretary.) In the mean time I feigned sickness, and remained at home. Twelve days had elapsed since my interview with the Vizier, and nothing remarkable had occurred. On the morning of the thirteenth day, my servant brought in my pipe and coffee as usual; I had nearly finished the cup, when I perceived an unpleasant taste, which excited my suspicion; I immediately took an emetic, and hurrying to the apothecary of the forces, he immediately recognized in the cup nearly two drachms of corrosive sublimate, upon which I swallowed the whites of several eggs, and experienced no further bad effects. Though the favour I enjoyed at Court, and the prominent station to which I had been advanced in the medical department of the army, had made me an object of envy to many, each of whom might wish to see me removed, yet it was but too evident, that the blow aimed at my life had descended from a higher quarter, and, accordingly, I used every exertion to obtain a passport *(buerouldi,)* and, at last succeeding, hastily quitted Turkey."

When any one in Turkey has become remarkable for power or wealth, it is usual to observe—" he will probably soon die of poison." Hence the rich eagerly cultivate the friendship of every newly-arrived physician, particularly of a Frank, lest he be employed to poison them. The sick Turk makes his physician or his slave take part of all his medicine, and the miserable menial vomited and purged for his more miserable master, has good reason to pray for a speedy termination of the malady. When a bottle of physic is opened, and the dose measured out, it is again immediately sealed up with the master's private seal, to prevent the introduction of any poison.

It requires no spirit of prophecy to foretel, that such a people cannot long retain even the most petty empire in Europe. National crimes are national weakness, and when the fruit is rotten at the core, the feeblest hand can crush it.

II. Dr. Graves on the Treatment of various Diseases.

In our last number, we had the pleasure of noticing a communication of this able physician, and we took the liberty of offering some observations on Morbid Anatomy, and on rational and empirical experiments. We lately met with some remarks very pertinent to the subject, and those from no less an authority than the great Lord Bacon. That extraordinary man has pointed out the sins of physicians, whether of omission or of commission, with admirable precision and felicity. He said well, that medicine is a science which hath been more professed than laboured, and yet more laboured than advanced, the labour having been rather in circle than progression. But it is particularly on the subject of treatment that we would beg to introduce Lord Bacon's observations.

In the consideration of the cures of diseases, I find a deficience in the receipts of propriety, respecting the particular cures of diseases; for the physicians have frustrated the fruit of tradition and experience by their magistralities, in adding, and taking out, and changing *quid pro quo*, in their receipts, at their pleasures, commanding so over the medicine, as the medicine cannot command over the disease; for except it be treacle and Mithridatum, and of late diascordium, and a few more, they tie themselves to no receipts severely and religiously: for as to the confections of sale which are in the shops, they are for readiness, and not for propriety; for they are upon general intentions of purging, opening, comforting, altering, and not much appropriated to particular diseases; and this is the cause why empirics and old women are more happy many times in their cures than learned physicians, because they are more religious in holding their medicines. Therefore here is the deficience which I find, that physicians have not, partly out of their

own practice, partly out of the constant probations reported in books, and partly out of the traditions of empirics, set down and delivered over certain experimental medicines for the cure of particular diseases, besides their own conjectural and magistral descriptions. For as they were the men of the best composition in the state of Rome, which either being consuls inclined to the people, or being tribunes inclined to the senate; so in the matter we now handle, they be the best physicians, which, being learned, incline to the traditions of experience, or being empirics, incline to the methods of learning.—*Essay on the Advancement of Human Learning.*

In another place, Lord Bacon points out the futility and vanity of frequent changes in plans and prescriptions, one day's method undoing that of the preceding.

But lest I grow to be more particular than is agreeable, either to my intention or to proportion: I will conclude this part with the note of one deficience more, which seemeth to me of greatest consequence; which is, that the prescripts in use are too compendious to attain their end; for to my understanding, it is a vain and flattering opinion to think any medicine can be so sovereign, or so happy, as that the receipt or use of it can work any great effect upon the body of man: it were a strange speech, which spoken, or spoken oft, should reclaim a man from a vice to which he were by nature subject; it is order, pursuit, sequence, and interchange of application, which is mighty in nature; which although it require more exact knowledge in prescribing, and more precise obedience in observing, yet is recompensed with the magnitude of effects. And although a a man would think by the daily visitations of the physicians, that there were a pursuance in the cure; yet let a man look into their prescripts and ministrations, and he shall find them but inconstancies, and every day's devices without any settled providence or project; not that every scrupulous or superstitious prescript is effectual, no more than every strait way is the way to heaven, but the truth of the direction must precede severity of observance.—*Ibid.*

We have introduced these passages, partly as curious in themselves, and illustrative of the extraordinary attainments and sagacity of the master-mind from whence they sprung, and partly as containing suggestions, which it were well even the present generation of physicians acted on more strictly and more universally than they do. In conducting clinical experiments on the powers of medicines, it is necessary, to make them of value, that the case should be freed from adventitious circumstances, and that the remedy should be as simple and uncomplicated as possible. To shew the necessity of these cautions, we will take a contrary instance. A poor child is admitted into a hospital, where it is well housed, well clothed, and well fed. At the same time, iodine is given for a scrofulous complaint. The child improves. Is the improvement owing to the exhibition of iodine, or to the alteration in temperature, clothing, diet, &c.? It is manifest that the experiment is an inconclusive one. We might cite many instances, differing in the particulars, but similar in the principle, and tending to the same result—an imperfect or a false experience.

There is no doubt that the great improvements that have recently been effected in the practice of medicine have been owing to the cultivation of morbid anatomy. But it must be recollected that there already existed a vast store of empirical experience, which the exact discoveries of morbid anatomy enabled us to apply. This empirical experience was itself the result, in a great degree, of chance, or of ignorant experimenters. The invention, then, of remedies, and the accurate knowledge of disease, are not necessarily connected. Remedies may be numerous, and a disease misunderstood; a disease may be well known, and remedies undiscovered. Circumstances have made the invention and accumulation of remedies precede an exact acquaintance with disease. The latter part of knowledge is of recent date—the former has existed

and grown since the æra of the first old woman that culled a simple.

It now becomes the province of scientific men to conduct experiments on rational principles. With the real nature of disease they are now almost as well informed as the investigation of structural changes can render them. It is their part to repeat in a more philosophic manner the experiments of their predecessors. They must not overrate morbid anatomy; it will not of itself teach them how to cure. The vast extant store of materia medica is an instrument in their hands, and means yet untried no doubt exist. Great inventions are generally in their origin mean and fortuitous; philosophy is usually concerned in their application and extension.

We make these remarks, imperfect as they are, and impertinent as to some they may appear, in order to induce physicians to conduct their clinical experiments in a philosophical manner. It is by these that our science may be materially improved, and it is by their combination with the demonstrative element of morbid anatomy, that it may assume something like the aspect of exactness: and this brings us back to Dr. Graves. The first fact related by him is presented as not only remarkable in itself, but as calculated to impress on every practitioner the propriety and necessity of an accurate examination of every case.

Fracture of a Rib produced by a violent Fit of Coughing.

On March 24th, 1833, a lady, æt. 47, tall and unusually muscular, consulted Dr. G. on account of pain in her left side. She had no fever, but inspiration was attended with extreme pain, felt in the situation of the left kidney and shooting upwards to the left shoulder; there were also great soreness and tenderness extending in every direction from central portions of the ninth and tenth ribs. The lady said that she had been seized with the severe pain five days previously during a severe fit of coughing, and that she had experienced the sensation of something having snapped. Leeches and a blister had been applied without relief.

Dr. G. was a little puzzled, but subsequently examined the lady in bed. He then found that the central point of tenderness was seated, not between the ribs, but on one of them, either at or very near the junction of the cartilaginous and osseous portions. Pressure here could scarcely be tolerated, and conveyed the sensation of the bone yielding—in fact, of its being broken. The lady observed that such had been her own suspicion, that she had felt as on a previous occasion when she broke her arm, and that she was easier when her stays were on. On applying a compress and roller, the lady immediately experienced relief, and gradually recovered without any other remedy being used.

In this instance there was no evidence of peculiar fragility of the bones, nor was there any disposition to scirrhus. Dr. G. is not aware of any recorded instances of fracture of ribs by muscular exertion. He cites a case of fracture of the sternum by muscular action, related by Dupuytren, and detailed in the April number of this Journal, page 532.

Suffocative Catarrh.

"Many have written on the best means of affording relief when the patient seems in danger of being suffocated by the accumulation of fluid secretions in the bronchial tubes. In such cases the secretion, instead of being scanty, is superabundant, and as long as the patient has strength, is easily expectorated. The very abundance of the secretion, however, and the constant necessity of expectoration, interferes with the function of aeration, and at length the sufferer becomes so weak that he coughs up with difficulty the sputa that obstruct the passage of air into the lungs. Each effort to do so fatigues him excessively, and adds to his debility; his countenance becomes more and more suffused and livid; the rattling of mucus is heard within the chest; the perceptive and mental faculties are dull and impaired, and, finally, the patient is suffocated after a painful and protracted struggle. This series of symptoms frequently attends common cold in the chest in those who are de-

bilitated by great age, and is not unusual in younger persons after a severe bronchitis which has lasted until their strength has been broken, and an excessive flux from the mucous membrane of the air-passage has been the consequence of its long continuance. The late epidemic influenza, in consequence of the extreme and immediate debility, and the violent determination to the mucous membrane of the air-passages which it occasioned, was a disease peculiarly well calculated to produce the state of things above described; and, accordingly, it often terminated in suffocation, from the accumulation of mucus in the lungs. This state must be carefully distinguished in practice from the dyspnœa and tightness of chest accompanying a difficult and scanty expectoration, for stimulants are often serviceable in the former, but never in the latter. When the danger is from excess of secretion and accompanying debility, we can only attempt a cure by medicines calculated either to diminish the quantity of fluid to be expectorated, or by means adapted to increase the patient's strength. Practitioners have sought to effect either or both of these objects by various means. Emetics, stimulating expectorants, such as decoction of polygala, with carbonate of ammonia, balsam of copaiba, combinations of antimonials, squills, and ipecacuanha, lac ammoniaci, mistura ferri composita, the frequent change of the patient's position in the bed, the inhalation of various vapours capable of stimulating the respiratory apparatus to renewed action, the application of blisters to the chest and nape of the neck, of the actual cautery along the course of the eighth pair of nerves, the use of wine or punch, have all proved occasionally successful in cases of this nature. Still, however, the instances of failure are so numerous and distressing, that it becomes the duty of every physician to seek for means still more efficacious and certain. Tonics and opium are well known to possess a powerful influence over the secretion of the bronchial tubes, and it has been long observed that when injudiciously exhibited, they often suddenly check expectoration, tighten the chest, and bring o the most formidable dyspnœa. A know ledge of those baneful effects induce me to hope that these medicines migh be so managed as to relieve the affectio of the chest, in which suffocation is th result of superabundant secretion an debility. As all practical men wer agreed that sulphate of quinine an opium, exhibited in the usual way, ha failed to produce relief in such cases, determined to try these medicines i the form of injection. Nor was an op portunity long wanting for the trial, a in the course of a few days I was calle by Mr. Wallace, of Townsend-street, t see a tradesman's wife residing at Ring send, and who was apparently almo moribund in consequence of a violen attack of influenza. The quantity o mucus she had expectorated during th last forty-eight hours was quite enor mous, and she had scarcely enjoyed moment's repose, so perpetually wa she urged by the necessity of coughin up this superabundant secretion. With in a few hours her strength had ap peared quite exhausted, her counte nance became livid, and she lay wit the sputa rattling in the air-passage until the imminent danger of suffoca tion roused her from a state of appa rent torpor to make an occasional effo to expectorate. To add to her suffer ings, she had been affected with a diar rhœa during the preceding night, an her stomach was so weak that she ha vomited once or twice during the morn ing. In this complicated and embar rassing combination of symptoms, i occurred to me, that besides applyin a large blister to the nape of the neck an between the scapulæ, it would be wel to use an injection of sulphate of qui nine and opium for the purpose o checking the expectoration, and accord ingly I directed the immediate use o an enema consisting of three ounces o solution of starch, ten grains of sulphat of quinine, and twenty drops of laud num. I must confess my anticipation of benefit from this expedient were s slight, that I did not venture to call o our patient next day without previously ascertaining whether she was still alive for in truth I did not expect that sh

could have survived the night. I was most agreeably surprised to find that she had slept very much since the administration of the lavement, and that the expectoration had remarkably diminished, while her breathing had become free, and the oppression of the chest less. Her strength had improved, and the lividity of her face disappeared; and, on the whole, her state, although not free from danger, was most satisfactory. The usual method of treating such cases was sufficient to complete her recovery."

Dr. Graves alludes to two other cases, each severe, in which the same means were productive of a similarly fortunate result. He remarks that emetics are sometimes remarkably effectual, but that they often fail, the stomach not being affected by them. In such cases Dr. G. warns the practitioner against exhibiting one emetic after the other in the vain hope of producing vomiting. He recommends, in such circumstances, a combination which he has lately used with considerable success, five grains of mustard-seed in powder and one of ipecacuanha, exhibited every hour or every second hour, according to the urgency of the case. When it is not desirable to excite vomiting the dose should not be repeated at too short intervals, but generally in bad cases there is no such danger. A patient in the Meath Hospital lately took, with temporary benefit and without nausea, fifteen doses in twenty-four hours. Dr. Graves recommends these remedies as addition to our stock in hand, fully conscious that all will occasionally be found unavailing.

Mortification of the Liver.

This is so rare that an unequivocal case is a valuable acquisition to pathology.

Case. Michael Brien, æt. 50, admitted into Sir Patrick Dun's Hospital, March 4th, 1833.

Ascites—œdema of the legs and feet; jaundice; on examination the liver felt forming an extensive tumour in the right and left hypochondria and epigastrium, hard, and painful when pressed —incapability of lying on the left side; pulse frequent, small, hard—tongue foul—great debility.

Has been subject to pain in the side, cramp and wind in the stomach, and some swelling of the abdomen for six months. The present attack commenced three weeks ago.

From the day of his admission till that of his death, on the 15th March, he progressively grew weaker, and suffered much from tympanitic distention of the bowels. During the whole of the 14th he complained of excessive abdominal pain and tenderness, and in the evening he suddenly began to vomit an extremely fetid fluid, mixed with a dark grey substance. The vomiting recurred at intervals till 5 o'clock of the following morning when he died, without suffering much pain immediately previous to his death.

Dissection. On opening the abdomen, about a gallon of serous fluid, deeply tinged with bile, flowed out; the liver was greatly enlarged, extending below the umbilicus, and part of its surface was covered with recently effused lymph. Large, white, solid formations, resembling cartilage, studded its surface, and were found in its interior. They were cupped or concave on the surface, and homogeneous and consistent in their texture. Between them, the texture of the liver was every where healthy. In the inferior portion of the left lobe there was an excavation larger than a man's fist, and half filled with a dark grey slough, of an extremely offensive smell, and precisely similar to the substance he had vomited. This slough was very dry, its fluids having probably been drained off by the large opening which formed a communication between the excavation in the liver and the stomach; the sloughy appearance extended to that part of the pancreas which lay in contact with the stomach, and another perforation of the latter had been formed in this place. An evident line of demarcation existed round the hepatic excavation, resembling the line of separation in external parts.

It appears to us that this is not a satisfactory instance of mortification of

the liver. The viscus was studded with the tubercular formations (tubercles of medullary sarcoma,) and one of these would seem to have sloughed, as morbid formations in all tissues not unfrequently do.

Purpura Hæmorrhagica.

"This disease is by no means unfrequent among the children of tradesmen and petty shop-keepers in Dublin, and its cause may often be traced solely to unwholesome diet, in which too much salt is habitually used. Practitioners are sometimes deceived, for on questioning the patient, he answers that his parent's circumstances are comfortable, that he has plenty to eat, and not unfrequently even gets meat for dinner. On a more accurate examination, however, it appears that the breakfast consists of bread, salt butter, and tea with very little milk; that herrings or other salted fish are often used at dinner; that bacon is also a favourite article of food, and that the supper consists of the same materials as breakfast. At dinner, too, salt, or salt butter are used to give a relish to the potatoes; and it is only occasionally that these persons enjoy the luxury of fresh meat or vegetables, the earnings which ought to be applied to the purchase of such articles being too often expended in dram drinking. This species of diet, together with confinement and unwholesome air, renders them peculiarly liable to *purpura hæmorrhagica*, in a form which merits the name of land scurvy. My only reason for mentioning this circumstance, is, because I have seen the true cause of the disease occasionally overlooked in our hospitals, and patients subjected to different, and sometimes rather violent, plans of treatment, when all that was necessary for their cure was a nutritious dinner of fresh meat and vegetables, with milk instead of tea for breakfast. Under the influence of this change of diet, it is curious how rapidly the spots of purpura fade away, and how quickly all tendency to hæmorrhage ceases. In the meantime the pulse, which had been so frequent as to induce an inexperienced observer to adopt the idea that the disease is of a febrile nature, diminishes daily in frequency, and this under the influence of nutritious diet, a circumstance well worthy of attention. I think that the cure is accelerated by the internal exhibition of citric acid, to the extent of half a drachm or more daily properly diluted and sweetened."

We feel the more pleasure in directing the attention of professional men to these few remarks on purpura, and facts connected with the disease, because we fear that the practice of bloodletting in cases of it, has too great a number of admirers. We made some observations on this subject in our last number, and to it we beg to refer our readers.

Effects of Jaundice upon Vision.

That "all seems yellow to the jaundiced eye," is known to be a poetical expression of a vulgar fiction. But Dr. Graves has lately met with three cases in which the vision was affected by the discoloration of the organ. Our able author enters into many considerations to show why vision should and why it should not be altered. Into these we need not enter. We may simply observe that, supposing the cornea and the humors to be jaundiced, there is no good reason why all objects should acquire a yellow tint. If we look through a portion of yellow glass not deeply dyed (and the cornea and humors have seldom a deep tint) we retain the faculty of appreciating varieties of colour, though yellow is of course made to enter into their composition. There are few patients who, if accurately questioned, are not sensible of such an alteration to a greater or less degree. This, at least, has been the case with those whom we have interrogated.

Emmenagogues.

Dr. Graves made some some remarks on a former occasion on emmenagogues.* He omitted to make mention of one remedy, and that a good one, a small blister applied to the inside of the thigh, near the pudendum, a day or

* See our last number.—*Ed.*

two before the expected period. In a recent and very obstinate case this proved successful.

State of the Pulse in Hydrocephalus.

Acute hydrocephalus has been divided into three stages, the pulse and other symptoms presenting remarkable alterations in each. Dr. Graves reports a case illustrative of this.

A boy died in Sir P. Dun's Hospital on the 15th day of the disease. The disease commenced with violent febrile symptoms, when the pulse was, no doubt, frequent. He was admitted on the 8th day. The pulse was on that day 58; ninth day, 68; tenth day, 80; eleventh day, 92; twelfth day, 104; thirteenth day, 100; fourteenth day, 135; fifteenth day, 168.

The following is the relation which the symptoms bore to the pulse.

First. When the pulse was only 58, it was irregular, and continued so for two days. After that, the irregularity began to diminish daily, and on the last day all irregularity had disappeared.

Secondly. When the pulse was 58, it was soft; when 168, it had become sharp; at the former period it was weak, at the latter of good strength.

Thirdly. When the pulse was at its slowest, the pupils were natural and contracted as usual. As the pulse rose, the pupils became more insensible to light. Yet though insensible to ordinary light, the pupils contracted on the day of the boy's death, when exposed to the light of a candle held close to the eye. On the 14th day, when the pulse was 135, the pupil of the left eye was more dilated than the right.

Fourthly. The convulsive fits, a prominent feature in the third stage of hydrocephalus, did not take place till the 12th day, when the pulse was 104. The fits rather affected the right side of the body, the left eye was distorted and squinted permanently, and the mouth was frequently drawn to the right side during the paroxysms.

Let us now look at the morbid changes.

Dissection, 16 hours after death.—"On raising the calvarium, the vessels on the dura mater were found extremely turgid. On raising this membrane, the pia mater was seen greatly congested; some effusion, tinged with blood, on the surface of the *right* hemisphere; *much greater* on the *left*, particularly towards the posterior part. The arachnoid presented a few slightly opaque spots on the upper surface of both hemispheres, and one continuous, thickened, and opaque patch on the inferior surface of the anterior lobes. On removing the cerebrum from the skull, about four ounces of serous fluid were observed in the base of the skull, and occupying the space around the medulla oblongata. The substance of the brain in general was rather softer than natural, but not more vascular. The lateral ventricles contained about six drachms of sanguineous serum; their lining membrane was increased in thickness and rendered semi-opaque. The *septum lucidum* had been entirely converted in a white shreddy mass which fell from its position, leaving an opening between the lateral ventricles of the size it had presented in the healthy state. This mass lay in a semi-fluid state in the anterior and lower part of the third ventricle. The *fornix* presented a remarkably soft state of its entire lower surface, *more especially at the right side*, where the softening extended through its entire thickness, and a deficiency of its margin, about three lines long, and one line in breadth, existed; the white substance which had *fallen out of* this deficiency lay in a pulpy mass on the plexus choroides; the surface of the velum interpositum was dotted with white matter fallen from the formix. The commisura mollis had nearly disappeared; the superior surface of the optic thalami was soft, but this state was there extremely superficial; *their inner* surface, to the depth of *a line*, was converted into a *blueish white* jelly. The plexus choroides was turgid, and closely studded with very minute vesicles. The white matter which has been noticed as having fallen was pulpy, and resembled white fibres connected by an extremely thin jelly."

Dr. Graves makes a few judicious observations on the case, which we notice in order to point out the con-

currence between symptoms and morbid changes. As Dr. G. remarks, two series of morbid alterations were found, one consisting of meningeal effusion and opacity, seen also in the arachnoid of the ventricles, a comparatively early affection: the other more recent, consisting of changes in the brain, the result, apparently, of a degree of inflammation of the cerebral substance. In the early stage we had fever, the expression of the meningeal inflammation, followed by the stupor, dilatation of the pupils, &c. the expression of the consequent effusion. In the last stage, there was again fever, with partial paralysis and convulsions, the expression, not of mere pressure on the brain, but of the cerebral inflammation and irritation. A case of this sort, well observed and reasoned on, will afford more practical hints to a philosophical mind than we have space to dwell on, or mere routinists possibly may comprehend.

III. DANGER OF EXAMINING FEMALES.

A pregnant instance of the risks incurred by medical men, in the incautious examination of female patients, has recently occurred at Liverpool, and given rise to a sort of judicial investigation.

It appears that a young woman, æt. 21, who had been in a bad state of health for two years, applied to Dr. Baird, physician to the Liverpool Infirmary, and, as we are informed, a practitioner of twenty years' standing, in the early part of last March. She was then suffering from debility, dyspnœa, constant thirst, occasional severe headaches, painful and irregular menstruation, frequent desire to make water, the legs and feet œdematous and painful, the veins of the right leg slightly varicose, and pains in the hip and thigh. Active remedies were several times prescribed, but no material benefit was obtained. About the end of March, she first shewed the Doctor her heel, on which was a piece of thickened cuticle, resembling a corn. At the next visit, the thigh having become swollen, in addition to the former symptoms, Dr. Baird proposed a private examination, to which the girl consented. The inguinal glands were found enlarged, but no uterine disease was discovered. At the present time the patient is nearly restored to health, after a continued course of alterative medicines, with digitalis, squills, and quinine.

Such is the statement of the case furnished by Dr. Baird. But this was not all. The girl, it would appear, related the circumstance of the examination to one of those elderly females who are found in or about most communities, and who generally prove a great blessing or a great curse to the generation of doctors. In the present instance, the veteran spinster excited some little hubbub, and the family complained of the indecency of the proceeding.

A gentleman, a reverend one, getting scent of this, complained to the Committee of the Liverpool Infirmary of the atrocious conduct of its physician, in examining the young woman. A junto of three, of which the reverend accuser was one, was delegated to inquire into the affair, and this impartial and well-qualified tribunal would seem to have "pronounced definitively against their officer," and even requested him to resign.

We will not stop to comment on the absurdity of much of the proceeding. The patient was not an infirmary patient, and, consequently, the case was not one for the jurisdiction of the reverend bench. If a man is condemned by the laws of his country for crime, or for any serious moral offence, the governors of an institution to which he may belong, are justified in taking steps to remove from among them one so unfitted for an honourable station. But that the rumour of a private faux pas, the mere suspicion of something wrong, should justify a public board in proceeding to hold a court martial on an officer of the establishment is a measure so unjust, so inquisitorial, so monstrous in every point of view, that all of right feeling must turn from it with disgust. All who know the nature of

medical reputation are aware that, to breathe on it the breath of suspicion, is often to taint it irremediably. The prejudices of mankind are concerned, and with prejudices it is vain to reason. What, then, must be the responsibility of those who could lightly lacerate the feelings, and perchance blast the fortunes of a medical man, in subjecting him to an inquest of such a character on such an occasion! We do not envy them, and least of all that clerical inquisitor, at once the accuser and the judge.

Bad as the business is, it is calculated to teach an useful lesson. A female should never be examined unless another female be present. This precaution should never be overlooked by those who wish to escape the imputations to which Dr. Baird has been subjected.

IV. Yellow Vision in Jaundice.

In our present Number will be seen some remarks on this subject by Dr. Graves. Dr. Elliotson, in his medical lecture, reported in our valuable contemporary, the Medical Gazette for July 13th, has some observations on it to which we are tempted to refer.

Dr. Elliotson states that Dr. Pemberton saw two instances of yellow vision, and that in both the jaundice was not very intense. Hoffman also saw two patients, who declared that all they saw seemed yellow. Dr. Elliotson has had two patients who have made the same statement, and, before citing Dr. E.'s account of them, we may premise that he attributes the yellowness of vision to the circumstance of inflammation existing in the cornea, and vessels carrying yellow serum colouring the medium. Whether this explanation be correct, we leave to observation to determine; but the following are the grounds for it.

"In July, 1826, I had a case of icterus in the hospital, where there was albugo of each eye, particularly of the left; and into this eye two large red vessels ran, and with it the patient saw yellow; but the right eye, which had no inflammation before the cornea, into which no large vessels were running, saw things in their natural colour. In 1827 I had another hospital patient who saw yellow with both eyes, and in him the conjunctiva immediately around the cornea, quite at the edge of the orbit, was greatly inflamed. I saw this morning a patient at St. Thomas's labouring under jaundice, who says that at the beginning of the disease he saw yellow. He does not know whether his eyes have been inflamed, but it is a fact that there are several pretty large vessels running not quite to the cornea, but pretty close to it. When patients see yellow, it is from the serum of the blood being conveyed before the pupil, through the cornea. It must be accounted for in that way. In the second case which I met with of this occurrence, I was prepared for inflammation of the eye by having noticed what I did in the first case. I looked carefully at the man's eye the instant he told me that he saw yellow, and I found, as I expected, that it was in a state of inflammation."

The fact appears to be, that sufficient attention has not yet been paid to the subject to enable us to determine the real and efficient cause of yellow vision, when it exists.

V. Diseases of the Eye in Cholera or after it.*

Mr. Middlemore noticed several cases of affections of the eye as a consequence of cholera, when it prevailed last year around Birmingham. The affections were chiefly amaurosis—extensive lymphatic, or puro-lymphatic deposition between the lamellæ of the cornea—ulceration or sloughing of the cornea—and suppuration of the eye-ball. In nearly every instance the disease occurred as the symptoms of cholera were subsiding.

Amaurosis. Sometimes this was complete, and often attended with scintil-

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* Med. Gaz. No. 41, for July, 1833.

lations or painfully vivid corruscations; sometimes it was partial and accompanied with muscæ volitantes. The patients had not generally had cholera very severely, but had suffered an unusual degree of pain in the head during its continuance.

Deposition between the Lamellæ of the Cornea. This mostly consisted of lymph or pus, or both. Sometimes it was inconsiderable—sometimes so abundant as to occasion sloughing of the cornea, or absorption of its lamellæ.

Ulceration and Sloughing of the Cornea. Sometimes this seemed to occur, without having been preceded by any appreciable amount of inflammation.

Suppuration of the Eye-ball. In every case the eye had sustained no inflammation adequate to the production of much pain. Uneasiness only occurred when the globe became distended in those instances where the cornea did not ulcerate and slough, and permit the evacuation of the fluids contained in the eye-ball.

We give the foregoing as facts, and they do not seem to us to require or admit of satisfactory comment.

VI. CROTON OIL AS A COUNTER-IRRITANT.

This is recommended by R. Hobson, M. D. Cantab. It is rubbed on the part repeatedly, so as to keep a fresh crop of vesicles continually rising; two or three drops, night and morning, will usually be found sufficient. The person applying the oil should not look at it, while rubbing it, in order to prevent the occurrence of a troublesome swelling of the palpebræ.

A very good means of obtaining a copious vesicular eruption, speedily and powerfully, is inunction with a mixture of the ung. hyd. fort., iodine, and tartarized antimony. It is an excellent application to the scrotum in the decline of "hernia humoralis," to facilitate the absorption of the effused lymph.

Dr. Hutchinson, physician to the General Hospital at Nottingham, has given a minute description of the local effects of frictions with croton oil. He has also related some cases in which the counter-irritation was beneficial. As we may suppose that there is nothing peculiar in the irritation, and may fairly presume that it does no more than equal counter-irritation produced in any other manner, we need not allude to particular cases. The following is Dr. Hutchinson's account of the effects of the friction.

"Six drops of croton oil, when applied to a sound skin, and rubbed in for a period of from eight to twelve minutes, speedily produces a rubescence, to a greater or less extent, depending upon the individual's susceptibility; this gradually increases, until a general, though moderate, tumefaction occurs, apparently affecting parts deeper seated than I have seen occur from the use of any other external irritant. This is succeeded, in a period varying from six to twelve hours, by numerous vesicles, some distinct, others confluent, differing in size and shape; at first containing a merely limpid serum, afterwards a distinct and consistent pus, and terminating in slight scabs. The redness produced is not of a vivid, but of a dull brick-dust hue. These circumstances, though regular in their course, vary much in intensity, according to the parts upon which the oil is applied."—*Lancet, May 18th.*

VII. CAROTID ANEURISM, SAID TO BE SUCCESSFULLY TREATED BY OPERATING ON THE DISTAL SIDE OF THE TUMOUR.*

Although the establishment of weekly medical journals has proved, and is likely to continue to prove, of essential benefit to the profession, the advantage is not without alloy. We regret to observe that our contemporaries are too often in the habit of publishing cases still in progress, sometimes from hospitals, sometimes from private practice. We

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* Lancet, June 29th, 1833.

need not remark on the mischiefs of this practice, for many read the early part of the case who never happen to light on the conclusion, and very erroneous impressions may be thus produced. We have had enough of false facts, without this formidable addition of imperfect ones. The instance before us is in point. Our contemporary, the Lancet, has headed the case as "carotid aneurism *successfully* treated, by placing a ligature on the distal side of the tumour." With what fairness this may be considered a successful case we shall now proceed to shew.

Case. The subject was a free black, tall, rather of a spare habit of body, but emaciated and debilitated. He had been for some time afflicted with a left carotid aneurism; had considerable cough, with irritation of the trachea, and frothy mucous expectoration, palpitation of the heart, great anxiety, and a fixed pain in the left temple. The tumour pulsated strongly, was very large, nearly of triangular form, the base occupying the space of two-thirds of the sternal portion of the clavicle, and ascending nearly four inches from the clavicle to the angle of the jaw, so that the volume of the tumour limited exceedingly the space for operating.

With care, and some very trifling difficulty, the artery was tied above, as it would seem, the omo-hyoideus muscle. On the 4th day, the first dressing was removed. The patient "appeared to be doing well," the pain in the temple having subsided immediately after the operation, and the cough, palpitation, and other distressing symptoms gradually giving way. The volume of the tumour was very perceptibly reduced, and the pulsation very indistinct. The operator was Mr. Montgomery, R.N. Surgeon of the Civil Hospital, Mauritius, and he receives much commendation for the manner in which he operated.

The report proceeds no farther than we have done, and we put it to any one of common sense or common candour, whether our contemporary is warranted in styling this a "successful" operation, or whether, in fact, it is desirable to publish cases at such a stage, whether they are styled successful or not. We are sure that science receives no benefit from their publication.

VIII. What Syphilis and Mercury can do.

Those who are anxious to solve this problem may easily do so, by walking into the foul wards of any large hospital, or by visiting a Lock Hospital, or even by looking at a very ungainly wood-cut, *not* after Titian, exhibited in the first page of the Lancet for the 15th June last. The print is from a sketch made by Dr. Weatherill, of Liverpool, a gentleman who has acquired some reputation in connexion with extirpation of the uterus, and who made some remarks on saline injections in cholera, rather characterised by boldness than by charity. But to the point.

We do not altogether admire the spirit in which Dr. Weatherill's narrative is drawn up, nor do we feel inclined to encourage the tone in which a fellow-practitioner is spoken of. If the circumstance of his being a "dispensary doctor" constitutes a crime in Dr. Weatherill's eyes, it does not follow that the gentleman should be publicly scarified on that account, and with all the deference imaginable for Dr. W.'s good nature, we think that the fault might have been stigmatized, without such marked and painful reference to the individual. We are tempted to notice the case, because we think it well calculated to instil an useful lesson, and because the injurious consequences of the injudicious exhibition of mercury cannot be brought too often, or too prominently, under the notice of the profession.

Case. The unhappy individual, whose vestige of a physiognomy is consecrated by the pencil of Dr. Weatherill, a widow, now æt. 38, applied with "symptoms of primary lues venerea" at the Liverpool North Dispensary, in the Winter of 1829. She was attended by one of the Surgeons for a period of eight

months, and "was several times salivated." The disease "crept on"—secondary symptoms occurred—"mercurial eruptions" appeared—"the throat, gums, mouth, and fauces, nose, eyes, and skin, were each and severally attacked by the combined forces of syphilis and mercury," and the surgeon would seem to have abandoned the case in despair.

The patient was now in a frightful condition—the face was extraordinarily mutilated by sores, the eyes, nose, mouth, &c. presenting no traces of what they should be, the lips completely sealed together, a circular opening only existing in site of the left angle—hearing impaired—and the whole a miserable picture of disease and destruction.

The patient was sent by some benevolent persons into the country, and owing to its influence, combined with tonics, the general health was considerably bettered, and the appearance slightly so. In March last she gave birth in the poor-house to a fine and healthy-looking boy. He died at the end of three weeks in convulsions; at the date of Dr. Weatherill's report, June 6th, she was dying.

Before we make any remarks on this really melancholy case, we must take the liberty of introducing a few remarks from the pen of Dr. Weatherill.

"Before closing my paper upon the case of this poor, unfortunate woman, I shall take the liberty to offer an observation or two on the medical treatment she received while under the professional care of the dispensary surgeon. The patient applied at the dispensary soon after the irruption of the complaint, and though she was attended for a period of eight months, yet the disease was suffered to go on to a most ruinous, fatal extent! In individuals infected with syphilis, and who allow it to commit its depredations on the system and constitution, uncontrolled because unresisted, I readily grant the mischief will soon be extensive and serious, and finally terminate, almost with certainty, in the destruction of life; but when an opposite course is pursued,—the incursions of the enemy anticipated and repulsed at the onset,—there is little or nothing unfavourable to be apprehended; the disease becomes disarmed, and the patient is soon after restored to the wonted health and vigour."

That they who live in glass houses should throw no stones, is a proverb probably familiar to Dr. Weatherill, and we venture to say that, when liberally criticising his neighbour, he little thought he was exposing himself to criticism. Yet we are sure that the remarks of the Doctor and the sketching of the case, display notions with respect to the venereal disease, of no little crudity and incorrectness. Where, for instance, did the Dr. discover that syphilis, if uncontrolled, would finally terminate, almost with certainty, in the destruction of life? Has the Doctor ever heard of the experiments of our army surgeons? If he has, he must have known that his dogma was opposed to facts—if he has not, we would recommend him to peruse them. Under any circumstances he has no right to speak so magisterially.

It cannot be denied that the case before us is a lamentable instance of maltreatment. Dr. Weatherill asserts that the ravages which occurred, were the consequence of the combined action of syphilis and mercury. We venture to say that they were not; we venture to declare that they were the consequence of the highly injudicious use of mercury alone. What the character of the primary symptoms was we are not informed, and we cannot, therefore, speak to the propriety or impropriety of employing mercury in the first instance, but that repeated salivations are most improper is as clear as any fact of the kind can be. It is astonishing how blindly mercury is given and persisted in by the great majority of medical men, even by those who should know better. Not a day elapses without our witnessing instances of this sort of mala praxis, either in public or in private practice. A patient has a sore, and mercury is given to a considerable extent. The throat then becomes ulcerated. Oh! says the surgeon, here is a secondary symptom, and he perseveres in his mercury, or after a slight inter-

mission prescribes another course. A pustule now appears on some part of the skin, it scabs, and an ulcer results. A fresh secondary symptom! says the surgeon, and again is the mercury in requisition, until at length the patient falls into a state of complete cachexia, or happily consults a more judicious medical adviser, who orders mild aperients, sarsaparilla, country air, or some of the many other means of restoring the general health. Unfortunately this is no imaginary portrait. The original has sat for it within this month.

The medical world are impressed with the idea that, cæteris paribus, if a sore or an eruption gets no better, it is an indication for more mercury. Cæteris paribus, it is an indication for precisely the reverse. The golden practical rule in the treatment of the venereal is this —never to put a patient on mercury when there is much inflammatory action—never to suffer the patient's general health to droop, but to support it by moderately good living and tonics —and finally never to carry a mercurial course beyond a reasonable time, say five or six weeks, or in some cases of secondary symptoms two months. If under all these precautions the disease, be it a primary sore or an eruption, get no better or become worse, let the surgeon wash his hands of mercury altogether, and try other and less formidable weapons. The patient's general health should on no account be allowed to be *impaired* by mercury; if it is so he has had too much of that mineral, or too little assistance in the way of good diet and tonics. We shall return to this subject at another time.

IX. Severe Case of Hydrocephalus terminating in Recovery.*

In a paper by Dr. Graves, noticed in the present Periscope, there is a very philosophical analysis of a case of hydrocephalus by that able physician. The case before us may usefully be added to that, in order to elucidate some points connected with the disease.

Practitioners are too apt to regard hydrocephalus as a disease, the symptoms of which are tolerably distinct and decisive, and not as a term applied to an affection varying greatly in its different stages, both in point of nature and of character. It has long been a contested point, whether serum once thrown out into the ventricles, is or is not absorbed. Leaving this to be settled by those who feel competent to settle it, we may remark, that much of the discrepancy of opinion has arisen from the opposite parties not having limited their facts to cases of the same disease, in the same stage. When we consider, on the one hand, that children have died with all the symptoms of pressure on the brain, and, after death, no cause of pressure has been discovered;—and on the other, that children presenting such symptoms have been relieved from them by tonic or even stimulating treatment, we must feel how difficult it is to decide on the existence of effusion. We are driven under such circumstances to the rigid observation of facts.

Case. W. D. C. æt. 20 mens. became the patient of the late Mr. Reay, of Liverpool, on the 24th of April, 1830, labouring under a slight remittent febrile attack, with some cough and occasional fits of screaming. Mercurial purgatives were given, but squinting supervened, and on May 14, Dr. Traill was called in. The child was now very hot, with a rapid pulse; the alvine discharges ill digested and extremely offensive; the abdomen, though not tumid, felt *doughy* or inelastic; the tongue was furred; there was no marked impatience of light, the pupils regularly contracted, but the child occasionally screamed, without apparent cause, and the urine was scanty. He had cut all the incisors, the canine teeth, and four of the first molares; smart doses of calomel and jalap, with a mixture containing squill, were prescribed, while the head was ordered to be kept cool by an evaporating lotion. At 1 a. m., of the 16th the child had a severe convulsive fit. *Gums dirided*

* Provincial Trans. Vol. I.

over the molares—enemata—leeches to the temples—warm-bath—castor-oil. On the 17th, more symptoms of cerebral affection—impatience of light; frequent screaming; convulsive twitches of the limbs—*leeches, blister between the shoulders, evaporating lotion to the head, calomel and jalap in repeated doses.* The blister was dressed with the ung. hyd. On the 19th there was strong strabismus; pupils much dilated, and nearly insensible to light. Yesterday and today all the other bad symptoms were increased; screaming more frequent; left side seemed paralytic, while the limbs on the right side were frequently and convulsively agitated. *Hyd. c cret. thrice daily.* On the 21st the blister was repeated, and castor-oil given. On the 22d, the pulse which had previously been generally rapid, was now between 70 and 80. *Cold applications to the head omitted.* On the 23d the urine was nearly suppressed, the eyes insensible to light. *Calomel and jalap—nitre-whey.* On the 24th, moaning and screaming, urine very scanty, one side (not stated which) quite paralytic, the other constantly affected with convulsive twitches. *Blister with ung. hyd. repeated—castor-oil, and enemata.* On the 25th, the child began to be under the influence of mercury, and the blistered surface was highly inflamed; convulsive motions less violent. From this time he continued slowly to improve. On the 1st of June, strabismus still continuing, the eyes appearing to be yet insensible to light, and the pulse being below 70, rather irregular, diuretics were continued, and a small blister was applied to the vertex, over the fontanelle. On the 4th, the urinary secretion was copious and the strabismus diminished. On the 5th the blister was repeated. Soon after the 11th July he was in vigorous health, and he remains free from complaint.

It is interesting to trace the successive phases of this affection—first, derangement of the bowels, pyrexia, slight affection of the thoracic organs, marked by cough: and of the head, evidenced by screaming—secondly, the head more decidedly affected, marked by increase of fever, a tendency to squinting, occasional screaming; probably inflammatory action of the arachnoid or substance of the brain was now going on—thirdly, increase of cephalic affection, shewn by convulsions and convulsive twitchings of the limbs, impatience of light, more frequent screaming; probably effusion was now commencing, and the vessels were much loaded, for convulsions, after injuries of the head, are generally found to depend on moderate pressure—fourthly, symptoms of decided pressure, evinced by the subsidence of the pyrexia and the paralysis. He who carefully considers cases in this manner—who groups the symptoms, and calculates, not merely what the name of the disease is, but what are the particular functional conditions or organic changes producing those groups, will be the philosophical and successful practitioner.

An obvious and an interesting fact in the preceding case, is the subsidence of the symptoms on the appearance of mercurialization. We subjoin the following observations of Dr. Traill.

"In the treatment of such cases, I have, for several years, discontinued the application of severe blistering to the scalp, which was once a very general practice; from having observed little benefit from that mode of treatment, and having, in some cases, thought that it tended to aggravate the symptoms. I have, of late, applied the blisters more frequently to the nape of the neck, under the impression that the inflammatory state of the brain was more certainly combated by deriving the fluids *from the head*, than by increasing the activity of the vessels of the scalp; while the application of cooling lotions, at the nearest possible point to the seat of the inflammation, has appeared to me a more successful method of treating this very fatal disease. With this mode of local treatment, I have long been in the habit of conjoining the abstraction of blood, either by leeches or the lancet, according to the age and strength of the patient; and, as the influence of mercurials in controlling inflammation, and in promoting absorption, appears to me well established, I usually endeavour to induce a constitutional ef-

ect, in such cases, as speedily as possible, both by giving it internally, and applying it as a dressing to the vesicated surfaces. Indeed, I believe that mercury will, in this disease in particular, enter the system much more readily by cutaneous absorption than by the lacteals. As pressure on the brain would seem more quickly to paralyze activity of the absorbents of the alimentary canal than of the *dermoid* surface, probably because of the immediate dependence of the former on the great sympathetic nerve. In the case about to be given, these were the indications which were chiefly followed."

We would merely add this remark. Delightful as a cure must be, it is precarious; and we stand a better chance of preventing effusion than of curing it. As soon, then as there are symptoms of vascular action in the brain, displayed in a tendency to strabismus, screaming, pain in the head, and fever, it is better to push the mercury, combined with purgation, and depletion or counter-irritation, as circumstances require. This has been, with us, more successful than waiting a little longer before the mercurial practice is adopted.

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2. Case of Umbilical Hernia, in which the Liver formed Part of the Sac.

This case is related by Dr. M'Lean, of Kilmalcolm, in our Glasgow contemporary for July.

In 1820, his opinion was requested regarding a tumor, situated immediately over the umbilical region of a child, aged nine months, which was first observed a short time after birth, and which had gradually increased in size. On examination, he found the umbilicus filled with a hard body, which yielded partially to pressure, and became somewhat diminished in size, apparently from the yielding of its contents, although the great bulk of the tumour still remained. Its external covering was of an ash-grey colour, and for eight or ten days before the child died, it became partially ulcerated and discharged a thin fœtid sanies. The child always cried bitterly when the swelling was handled, pressure apparently producing considerable pain. The bowels were very much constipated, the dejections dark and offensive, and occasionally of a clayey colour and consistence. The appetite was impaired, and there was sometimes vomiting after taking any solid food, although no bilious or feculent discharge ever took place from the stomach. The child was ordered frequent doses of calomel and rhubarb, with other mild laxatives, to keep the bowels as regular as possible, but this was very difficult, there being much tendency to costiveness present. Warm fomentations were frequently applied to the tumour. By degrees it became softer, and fluctuation was distinct; but it was not considered advisable to open it, as the child was evidently fast sinking. Pressure on the tumour at this time had the effect of bringing on convulsions, and four days after fluctuation was perceived, the infant died in a convulsive paroxysm.

Dissection. The tumour was an umbilical hernia, and the sac contained a large portion of the liver, indurated and covered with numerous tubera, and about three inches of omentum, along with a portion of ileon. These parts were all completely matted together, and at the lower part of the sac, surrounding the lobulus spigelii, there was a considerable quantity of purulent matter. Nothing like stricture was observed, but from the strong adhesions which existed between all the parts contained in the hernial sac, considerable obstruction to the action of the intestines would no doubt be the consequence. The stomach and intestines exhibited traces of inflammation apparently of long continuance, and some portions of their peritoneal surface shewed numerous small dark-coloured spots. The other viscera were healthy.

Gay, Nourse, and Bohnius, are mentioned by Pott to have met with cases, in which the liver was contained in an umbilical hernia.

XI. AFFECTIONS OF THE SEPTUM OF THE NOSE.*

Mr. Fleming, surgeon to St. Anne's Parochial Dispensary, has communicated a paper on some affections of the nasal septum to our valuable contemporary of Dublin. The particular affections which he describes are two —bloody tumour of the septum, and abscess. We suppose that the pugnacious propensities of our Hibernian countrymen would render the former accident frequent, and surgery is probably indebted to the shillelah, for some of Mr. Fleming's elucidations.

Bloody Tumour of the Septum.

This is always, as Mr. F. believes, the result of injury. These tumours resemble common ecchymosis in other parts of the body, and are often as quickly formed, generally within the first few hours from the occurrence of the accident: they usually occupy both sides of the septum, but may be confined to one; their extent and form are very variable, the mucous membrane in some cases presenting only a flattened elevation, appearing as if raised by an uniform effusion underneath, and in others being distended to a greater or less degree. There is considerable resistance in their feel, and this, combined with extreme tension, and surrounding hardness, renders it proportionably difficult to ascertain the existence of a fluid within. Mr. F. has always been able to see them by gently pressing the tip of the nose, and dilating the nares; their colour is of a dark purple, and they present a smooth and glossy appearance: their connexion with the septum is by a broad base, with abrupt boundaries. The principal symptoms complained of by the patient, are a general fulness and stuffing of the nares, proportioned to the extent of the effusion.

Mr. F. relates a case in which he was obliged to puncture the swelling. The patient, a gentleman, was struck on the nose by his horse's head while hunting. The nose bled much at the time, but Mr. F. was not called to him till the following day, when he complained greatly of obstruction within the nostril. On throwing back the head, and gently pressing the tip of the nose, each opening of the nostrils presented a tumour, tense, shining, and of a dark purple colour, nearly filling its calibre; each tumour could be distinctly traced along its outer side, with a probe, passing insensibly, by a broad base, upwards and backwards towards the septum; this appeared to form a partition between them, although a communication was suspected from the effects produced by the alternate pressure of the finger passed into either nostril, for by this means, the tumour on the opposite side was rendered fuller and more prominent. By the same manipulation, the existence of a fluid within was clearly ascertained, particularly if the nose, at the same time, was grasped at its upper part, by the fingers of the opposite hand. In consequence of the extreme local suffering, Mr. F. punctured the tumour in the right nostril with a lancet. The effect was instantaneous relief. A quantity of blood, half fluid and half coagulated, escaped, and by pressure, both tumours were evacuated through the same opening, and subsided considerably: a good deal of diffused hardness and tumefaction yet remained, which prevented any accurate examination of the septum. Cooling applications, leeches, rest, and the use of some gentle saline aperients, were directed. For many days a fulness and tenderness on each side of the septum existed, in other respects no remarkable occurrence took place in the progress of the case towards its ultimate cure.

Mr. F. observes that, in the treatment of these cases, we must be guided by ordinary principles, and that the necessity for an incision must be very rare.

Abscess of the Septum.

"Abscesses of the septum are then occasionally met with as the result of injury. As such they may be acute or chronic. They may also arise independent of that cause, in which case

* Dublin Journ. No. X.

they appear frequently to be connected with some scrofulous disposition in the constitution, or with the presence of some of the exanthemata, as variola, measles, scarlatina. The nature of the injury to the nose likely to produce abscesses of the septum varies. I think, however, they occur often where there is an accompanying wound of the integuments, and where that wound is situated near the lower extremities of the nasal bones, with or without injury to them. It usually happens, that the abscess is fully formed, when the surgeon is applied to, or (if he have had an opportunity of watching the case from the commencement) that the exact situation of the inflammation escapes his observation, until it has advanced too far to prevent suppuration. In those abscesses, the integuments of the nose generally partake of the inflammation. Though not always discoloured, they are œdematous, and tender on pressure. The pituitary membrane is inflamed throughout, and that portion of it covering the septum is particularly turgid. Its natural secretion is also suppressed, and should any external wound be present, it looks angry and irritable. The constitution generally sympathises, and ordinary feverish excitement prevails. At an earlier or later period, matter is formed under the mucous membrane, occupying either or both sides, usually both; and in proportion to the extent of the effusion, there is a tumour, more or less prominent, in either or both nostrils, producing corresponding obstruction. The pain, as we might have anticipated, spreads along the mucous membrane to the frontal sinuses, and lacrymal passages; hence the lacrymation and uneasy sensations in these parts complained of by the patients. It likewise occasionally spreads downwards; hence tumefaction of the upper lip and lower margin of the septum. The appearance of these tumours is remarkable. They are smooth and shining, and of a bright red colour; very tender on pressure, and give a distinct sense of fluctuation. They are somewhat fixed, and do not appear influenced by the ordinary acts of respiration. Their connexion with the septum is by an extensive base, and in every case I have seen, there has been a communication between those on opposite sides."

Case. A coachman, æt 40, fell and struck his nose against the edge of the curb-stone. A wound was produced. It was dressed, and, for eight or ten days nothing unusual occurred. The wound then became extremely painful, the pain extended to the neighbouring parts, the nostrils grew obstructed, and there was febrile disturbance. Mr. F. now saw the patient. The nose was enlarged from subcutaneous effusion, which implicated, with cutaneous redness, the eyelids, lower part of the forehead, and upper lip. There was much lacrymation, much pain on pressure, ulceration of the wound, exposing the nasal bones denuded, and a probe could be passed on either side of the septum for some distance upwards, backwards, or downwards. The nostrils were blocked up by two highly-vascular tumours, which projected considerably beyond their margin. These tumours were tense and polished on their surface, and so fully occupied the nostril, that they were almost fixed and unaffected by the ordinary act of respiration. By firmly compressing the nose at its lower part, a thin, sero-purulent fluid could be expressed through the ulcer; by having recourse to the same means of compression at the upper part, the tumours below were rendered more tense and projecting, and by alternate movement, no doubt could be entertained as to the existence of a fluid within them. The outer boundary of each was defined, and could be traced with a probe towards the median line, where the septum separated them. Mr. F. made an opening with a lancet into the tumour, in the right nostril, when a large quantity of a thin purulent fluid escaped, and both the tumours subsided, leaving the mucous membrane in loose sacculi, on each side of the septum. A dossil of lint was introduced into the opening, and ordinary local and general remedies directed. Great relief was experienced from the operation. Much difficulty was experienced in

keeping the opening free, and six weeks elapsed before the wound was healed. Twelve months after the accident, Mr. Fleming met the patient, and examined the nose. No exfoliation had taken place, but occasional uneasiness was felt in the cicatrix of the original wound. The central portion of the cartilaginous septum appeared to have been absorbed, and to have admitted of the adhesion of the opposite surfaces of the mucous membrane to each other. This had produced a change in the form of the nose, the dorsum having fallen in, in a slight degree, between the tip and the extremities of the nasal bones. No other peculiarities were to be observed.

"Abscesses of the septum are always to be looked on by the surgeon with anxiety. He ought to have recourse to every means in his power from the date of the injury to the nose, to prevent their formation, and when the slightest grounds exist for suspecting the presence of matter, he should not lose time in making an opening to evacuate it. This is the only chance the patient has of escaping a tedious disease, and ultimate deformity, from the bones or cartilage partaking of it. The thickened state of the mucous membrane is to be borne in recollection in puncturing those tumours, and in their future treatment. They should be rendered as tense as possible by firmly grasping the upper part of the nose, and in the subsequent visits the opening should be freed, as the fulness of the tumours may indicate the fresh accumulation of fluid. The discharge is generally of a thin, sero-purulent nature, and in the progress of the case I have remarked, that it assumes a glairy consistence. The mucous membrane is slow in recovering its healthy condition. It is, however, materially assisted by different lotions: in the inflammatory stage, those containing lead and zinc are grateful; in the chronic, the black and yellow mercurial washes, and the diluted citrine and zinc ointments, will be found beneficial. The general, local, or constitutional treatment does not require any particular comment."

Mr. Fleming appears to consider as a peculiarity, the discharge assuming a glairy character in the progress of the case. This is observed in all abscesses. As the cavity contracts, and the cure is effected, the discharge invariably passes from the condition of purulent to glairy, and from that to serous.

Mr. Fleming has also seen instances of abscess arising spontaneously. They are seldom suspected by patient or practitioner, till fully formed. He has never seen the outer parietes of the nose engaged in these abscesses. With the following quotation we will drop the subject.

"Their appearance is natural, and unless deformity exist from the extent of the abscess, we are obliged to examine the nares for their detection. Here the only peculiarities they possess different from the symptomatic or acute, are, that there is a less shade of redness in their colour, that they are less tense, and that they bear more pressure without pain. I think also, they are much more extensive, and more likely to occur singly on either side of the septum. I have met with the case of a countryman, where not only each cavity of the nostril was occupied by a tumour, but there was considerable protrusion of the upper lip, and on everting it, an abscess exactly resembling in appearance and situation a common gum-boil, was found at the root of the septum, which, on being opened, gave exit to a large quantity of thin, purulent fluid, and caused the subsidence of all the swellings. Again, I have had under my care a young lady, with an abscess about the size of a spanish nut, occupying only one side of the septum, about an inch or an inch and a half from its anterior margin. The history of the first of these cases was most confused and unsatisfactory. The obstruction in the nose had been felt for an indefinite period beforehand, and with so little uneasiness or pain was it accompanied, that I really believe, were it not for the deformity, no application would have been made for relief. It had been considered in the neigbourhood of the character of polypus. Its termination I am not aware of, I am only satisfied of its nature.

ount which the lady, who was
ject of the second case, gave of
was as follows: when travelling
nd about a month before, with-
previous uneasiness in the nose,
denly perceived a most disagree-
some smell, which, at the mo-
he was inclined to attribute to
cidental cause in her apartment,
otel at which she stopped. She
ot, however, get rid of the sen-
and although it varied in its
cy, it was more or less constant.
those circumstances, she applied
In the examination of the nares,
only observe the tumour I men-
connexion with the septum. It
istulous opening, through which
ut a thin fluid, having the fetid
omplained of. Some time elapsed
it subsided. It ultimately, how-
d subside, and was most bene-
y the occasional injection of a
solution of the nitrate of silver,
administration of mild altera-

R. AYRE ON CHOLERA. 1 Vol. 8vo, pp. 167, Sept. 1833.

H we received this work at the
h hour, we are unwilling to let
unnoticed in the present num-
The epidemic has paid us ano-
part visitation, and how long it
ntinue to recur is yet a matter
ecture. Dr. Ayre's attention has
en directed to cholera, both the
n annual disease and the malig-
r epidemic form of the malady.
inions and practice are, there-
ntitled to the serious consider-
f the profession.

curious that, in the year 1817,
te of the great outbreak of the
in India,) cholera was epidemic
land, and was described, in 1818,
Ayre himself. Speaking of se-
ses and types, he observes—
is was especially the case in the
317, when it prevailed as an epi-
; and when, amongst several of
r grade, there were a great many
f it, in which, as a part of the
int, there arose a condition of the system which had rarely before been witnessed, and never, perhaps, with such distinctness. This condition consisted in a great oppression or collapse of the vital powers, and disturbance in the nervous and sanguiferous systems; and characterised by a deathlike coldness and lividness of the surface, by a feeble pulse, a sunken countenance, violent vomiting, with a manifest diminution or suspension in the secretion of the bile. When these symptoms subsided spontaneously, and the patient survived them, a state of fever supervened, which, after running a course of one or two weeks, frequently assumed a typhoid form."

Dr. Ayre considers the Indian and the English disease to be identical—the epidemic character rendering the latter more fatal and formidable than when in the sporadic form. In a chapter on the remote causes, he very ably advocates the epidemic and non-contagious nature of the disease; but enough has been said on that subject, and we hear little or nothing now about contagion. In some of our hospitals, when a case occurs in a ward, the patient is not even removed to a separate ward, but treated till death or recovery takes place, like any other patient, and without exciting the least alarm of infection among the residents of the same ward! Who would have believed this in the beginning of last year!!

One of Dr. Ayre's chapters is on the nature or pathology of cholera. Dr. Ayre thinks that the collapse cannot be accounted for, by any supposed change in the composition of the blood, or any loss of certain constituent parts of that important fluid. On the latter point we certainly disagree with our author. The more we see of cholera, the more we are convinced that the disease, in all its worst forms, is a *serous hæmorrhage* from the mucous membrane of the alimentary canal. We quite agree with Dr. Ayre, that—"The premonitory diarrhœa, which, if neglected, runs into the disease, and in a multitude of cases forms the incipient stage of it, is often directly induced by irregularities of diet, as a large indigestible meal, and may be arrested, and the full develop-

ment of the true disease prevented, by remedies of a common kind, and which have confessedly no power to prevent, or correct any *change* in the condition of the blood." Granted. We are quite convinced that, be the primary cause what it may—malaria, atmospheric constitution, or contagion if you please—the effect is a diarrhœa, which diarrhœa is the first stage of the serous hæmorrhage—and collapse is the natural consequence of the loss of the serous part of the blood. This loss is, we verily believe, worse than an equal loss of pure blood from the bowels; because, in common hæmorrhage, what blood is left, is fluid and good; whereas, in cholera it is thick and unfit to circulate or support life. The pith of Dr. Ayre's theory is found in the first of his inferences.

"1st. That the cholera morbus essentially consists in an interruption, and, in its malignant form, in a sudden and entire cessation of the secretion of the liver, and primarily, as the result of it, of a congestion of the portal circle, or secretory system of veins of the liver; and, in the malignant kind, successively of those veins of the abdominal viscera and vertebral column, whose venous circulation is associated with them."

We need hardly remark that this is almost precisely the theory broached nearly 20 years ago, by the editor of this Journal, as any one may ascertain by referring to the chapter on cholera morbus, or mort de chien, in first and all subsequent editions of "the Influence of Tropical Climates, &c." We shall quote the ninth inference respecting the remote cause.

"9th. That the remote cause of the foregoing pathological conditions consists in a morbid irritation primarily set up in the stomach and bowels by a certain malaria, assisted by unwholesome ingesta;—that the malaria is of a specific nature, and generated in certain localities conspicuous for defective drainage and other definite peculiarities, and modified or wrought into its state of malignancy by certain concurrent, but unappreciable conditions of the atmosphere;—that the specific malaria thus modified exerts its influence chiefly in the localities where it is generated, and where, from its concentration, it is embued with the most power; and, lastly, that it affects within the range of its influence almost exclusively those only of the community in whom a predisposition is induced by the habitual disuse of animal food, and by the derangement of the stomach and of the system, and which has resulted from an exclusive, and, therefore, inordinate use of a vegetable and ascescent diet."

The above is also the etiology maintained by Dr. Johnson twenty years ago, in the volume alluded to.

TREATMENT.

In the premonitory diarrhœa, or first stage of the disease, Dr. Ayre gives one grain of calomel united with two or three drops of laudanum, repeated every hour, or every half hour, for six or eight successive times—and then, every six hours, or twice a day, for a short period, directing rice to be substituted for bread or potatoes, and to take some animal food. The patients were directed, if the disease assumed a more serious form, to begin immediately with the calomel and laudanum, every five or ten minutes, and to acquaint him with the change. Very few treated in this manner lapsed into the worst stages of the disease.

In the stage of *collapse*, Dr. Ayre usually gave a grain of calomel, with one drop of Battley's sedative liquor, in a tea-spoonful of cold water, every five or ten minutes, according to the urgency of the case.

"In a few cases of extreme severity, I gave two grains of calomel every five minutes for an hour or two, and then resumed the ordinary dose of one grain. In giving this medicine, no other limit is required to be set to its use than that which the state of congestion or collapse imposes; for pending its duration the medicine must be uninterruptedly continued, watching, at the same time, the decline of the disease, and widening the intervals of giving the medicine to ten, fifteen, and twenty minutes, until it becomes evident, by the symptoms, that this stage of the disease has passed away; for the mercurial effect of ptyalism, which is of no advantage to the complaint, will be excited if the medi-

cine be used to any extent, either before the collapse has commenced, or after it is removed. In a very few cases only were there any ptyalism produced, and in them it was inconsiderable, and chiefly confined to the slighter kinds, and to those which were treated as premonitory, and not reported."

In cases of the most intense severity, and where the collapse had been greatly protracted, with profuse discharges from the bowels, much advantage was derived from starch and broth glysters, with opium. Except cataplasms of mustard to the abdomen, with bags of hot sand to the feet, few other auxiliaries were used. Indeed we have every reason to believe that thousands of lives have been lost from officious interference, and a farrago of heterogeneous and stimulating remedies, in this formidable complaint.

We need not dwell on the consecutive fever. It is always symptomatic of inflammation, and generally of the stomach or bowels. Leeches to the epigastrium, and antiphlogistic treatment are the best practice.

In conclusion, we believe this plan of Dr. Ayre's to be, perhaps, the best as it is the simplest of any now in practice. With some modification, it is that which we have employed in the epidemic of this year.

XIII. Mr. Carmichael on Inflammatory Affections of the Brain and its Membranes.*

This paper consists essentially of cases, chiefly detailed from memory, and the apothecary's file of prescriptions. This is not an unexceptionable mode of recording facts. Appended to the paper are "a few desultory observations," nearly as long as the paper itself.

The object of M. Carmichael is stated to be—"to give a few illustrations of the variety of symptoms, which an inflammatory state of the brain, or its investing membranes, is capable of producing." The first illustration is the following.

* Dublin Journ. No. X.

Case 1. "On the 18th of March last, I was called at a very early hour in the morning, to see Mr. H——, a robust, full man, about 38 years of age; I found him walking about his drawing-room, apparently in great anguish. He complained of violent pain in his ear, shooting upwards along the side of his head, which had affected him more or less during the preceding fortnight. He stated that he had been under the care of Mr. Barker, of Great Britain Street, but that he had attended little to his advice, as he not only went to his office almost every day, but dined and supped out, and even had gone a hunting." The pulse was quick, the tongue white, the countenance indicative of great pain and distress.

Mr. C. considered the case one of inflammation, ordered 16 leeches near the ear, cathartic medicine containing tartarized antimony to be taken every hour. In the evening the patient was better, and Mr. C. did not see him again till the 20th.

He was then suffering from pain, though less than before. The expression of the countenance was bad, and he complained much of sickness of stomach. Ordered—*Cal.* gr. iij.—*pulv. ipec. comp.* gr. x., *followed by cathartic medicine. A blister behind the ear.*

On the 21st the pain continued—he had had a bad night—pulse frequent and feeble.—*Cal.* gr. j. *omni horâ.*

22d. Better—pulse only 80—stomach a good deal disordered still. It was therefore determined to give him occasionally, in addition to the other means, a couple of spoonsful of a cold infusion of bark, in a state of effervescence, and at night, in order to induce sleep, a bolus, composed of three grains of ext. of hyosciamus, with two grains of camphor, was ordered.

Mr. Carmichael's attendance was now discontinued, and another gentleman, Mr. Irvine, took charge of the patient. On the 24th, however, Mr. Irvine again called in Mr. Carmichael to see the patient who was comatose. He had been ordered on the preceding night the fourth of a grain of the acetate of morphia. A mustard emetic was given, under an erroneous suspicion of a mistake hav-

ing been made in the medicine—16oz. of blood were abstracted from the temporal artery—a blister was applied to the head, a sinapism to the epigastrium, and a cathartic enema administered, but in spite of all these means the patient was seized with strong convulsions, and died comatose, and with stertor, during the night.

Dissection.—"An extensive purulent secretion, of a pale greenish colour, was found between the arachnoid membrane and pia mater, where these membranes invest the lower surface of the middle lobe of the right hemisphere, and the lower and lateral surface of the middle lobe of the left side, extending over a portion of the anterior lobe of the same side. On slicing the brain, the substance appeared studded with many red points; on opening the lateral ventricles, about half an ounce of fluid was found; choroid plexus, not more vascular than usual; some purulent secretion was found on superior surface of cerebellum of left side, also on the pons varolii and commencement of medulla oblongata.

The pia mater between the convolutions of cerebrum on left side, was as red as the conjunctiva of the eye in inflammation of that membrane.

The petrous portions of temporal bones were perfectly sound; nor did the neurilema of the seventh pair of nerves appear inflamed, notwithstanding the violent pain complained of in the right ear, and the last day in the left."

We must confess that, great as is our respect for the talents and attainments of the gentlemen concerned, we do not approve of the treatment pursued in the preceding case. A plethoric person has violent pain in the side of the head, which has lasted for some time and been aggravated by imprudences, and is attended with loaded tongue and quick pulse. He is relieved by leeches and cathartics. We would rather have bled the patient than leeched him; but let that pass. Two days afterwards he is again found suffering from pain, and he has sickness of stomach. Under these circumstances, he is ordered three grains of calomel and ten of Dover's powder, with cathartics and a blister. Why was opium given? Under such circumstances bleeding, or cupping would surely have been preferable to the blister, and an active system of purgation with calomel would, in our humble opinion, have been the most appropriate remedies. He is now, however, put on mercury and improves a little, when he is ordered bark, with hyosciamus and camphor. Again after this narcotics are given. He dies with purulent effusion between the membranes. We repeat that, we think the patient would have had a better chance of recovery, if he had been more actively treated in the first instance, and more antiphlogistically throughout. We have noticed the case with the view of cautioning practitioners, for, unfortunately we have seen others not very dissimilar.

The next case is intended to illustrate the powers and the use of a tartar emetic plaster.

Case 2. Early in May last, Mr. C. was called to see a gentleman, aged 70, on account of intense head-ache, which he had suffered from for some time, and an anthrax on his neck. The tongue was foul, and the digestive organs much deranged; he was subject to vertigo and tottering in the limbs.

The anthrax was scarified, the bowels opened daily with blue pill and ext. of colocynth, and small doses of quinine with sulphuric acid prescribed. The anthrax did well, but the head-aches continued severe, the attacks of vertigo were frequent, and the giddiness of the limbs increased. Leeches were ordered to the temples, cold applications to the head, and a blister to the nape of the neck, followed by the use of tartar-emetic ointment; while blue-pill, combined with colocynth, was given with the double view of acting on the bowels, and of exciting such a mercurial action as would tend to check any inflammation that might exist in the brain or its membranes. The headaches under this system were soon lessened, but he began to loose his speech; his memory failed him so far that he forgot the most common words, and from being intelligent and active, became quite

imbecile in intellect and unable to move. He now continued in a lethargic state in bed. Tempted by the result of another case Mr. Carmichael determined to apply a plaster of tartar-emetic to the occipital region. In 24 hours considerable pain was excited, but the plaster was kept on for 64 hours, when it was found to have produced an extensive sloughy-looking sore. The patient's recollection and speech now returned, almost suddenly, and after this time he gradually recovered, and continues well.

The case is practically interesting, and should be kept in mind. We think that Mr. Carmichael should rather have avoided the quina in the first instance. Anthrax or boils occurring with headaches seldom require tonics, indeed the latter are almost always injurious in such circumstances. The most that should be done is to give nutriment without stimulus.

The third case presents nothing of interest. The fourth has all the characters of mania following injury, and probably produced by chronic inflammation of the brain or its meninges, the consequence of the injury. It is interesting and we will give some account of it.

Case. A gentleman, about 70 years of age, of rather a full habit, and subject to gout, was thrown from a gig, and received a severe contusion on the head. He slowly recovered from the fall, and his manner was observed to be greatly altered. In spite of the advice of his medical attendant, he lived freely. In the last days of May, he was attacked with sudden delirium, increased vascular action, and nervous excitement, great inquietude, constantly kicking the bed-clothes off by means of the feet, tearing off his shirt, and getting out of bed and in again; suppression of the biliary, intestinal, and urinary secretions; a high degree of cerebral excitement, evinced by hot scalp and unnatural fulness of feature, as well as by the lively eye. On the third day of the attack, Mr. Carmichael saw him. The symptoms were such as have been described—the pulse 120, with some degree of sharpness — the bowels not moved by large doses of calomel and croton oil.

Mr. C concluded that there had been chronic inflammation of the brain and its membranes, and that a more acute attack had supervened. He proposed venesection, to be followed by mercurialization as rapidly as possible. Dr. Wright observed that the patient had been bled moderately at the commencement of the attack, but that immediate prostration had succeeded. However, 12 ozs. of blood were abstracted from the arm, and eight grains of calomel given. In the course of three hours, the medicine had a powerful effect on his bowels, although previous to the bleeding it had resisted treble the quantity. After his bowels had been affected he became cold and feeble, with a small wiry pulse. In consequence an anodyne draught was given to him, which restored his pulse, and threw him into a sound sleep for several hours, a refreshment he had not enjoyed for many nights, and he awoke in the morning able to answer questions with distinctness. The further treatment pursued was calomel, so as to affect the system—blistering of the occiput, and cold applications to the forehead and upper part of the head. On the 3d June, 10 ozs. of blood were again abstracted. On the 9th the mercury was discontinued. At times, there was sinking, with irregularity of the pulse, which was always restored by small doses of morphia. On the 12th active measures were discontinued, and equal parts of camphor mixture and infusion of valerian were given three or four times daily.

The progress of the case may be explained, by the following extract of a letter from Dr. Wright to Mr. Carmichael.

"On the fourth day, the patient got all the unfavourable symptoms of the last stage of typhus fever—the pulse sunk, he became comatose, with subsultus tendinum, involuntary evacuation, catching at imaginary objects, picking the bed-clothes, hiccup, tremulous motion of the muscles, falling of the jaw, with stertor, and hemor-

rhage from the bowels.' [This symptom was owing to the mercury, which was then discontinued.] 'On the seventh day there was a crisis; the symptoms generally suffered a remission, but on the eighth day there was an increase of the symptoms again, or rather a return of the former symptoms in a modified degree; there now came on a convulsive starting, and involuntary throwing about of the hands. On the fourteenth day another favourable change took place; there was some little looking up during the week following, and on the 21st day there was another marked crisis, and from that day his health has been gradually improving. He is daily gaining strength, but I am sorry to say the mind does not improve; he labours under marked imbecility. Although the lawn of —, and his own improvements, are before him, which he notices and talks of, he thinks he is at Newtownbarry: he is quite cheerful and merry, but will not dress himself properly, and he must be humoured, or he would become restive; sometimes he converses rationally for a few minutes, but soon flies off to some fancied subject."

We would recommend Mr. Carmichael to be more methodical and more concise in the narration of his cases. They are sadly diffuse. Indeed, if we could venture to hint a fault in the papers of our excellent contemporary, it would be such an one as we have noticed in Mr. Carmichael. The warm imagination and the generous fancy of Irishmen are seldom trammelled by the cold and sullen rules of exact composition.

As an instance of the picturesque style of their facts, we may adduce the opening of Mr. Carmichael's fifth case. The cumulation of epithets, and the liveliness of the description, cannot fail to be perceptible to those most unaccustomed to the analysis of literary efforts.

"On the 6th of May last, a drunken fellow of the name of Michael Reilly, was admitted into the Richmond Hospital, under Dr. Hutton's care, with his ear literally ground off by the friction of the wheel of a dray, which he was attempting to drive while in a state of most deplorable intoxication.

Not only was the entire of the left ear destroyed, but a frightful lacerated wound, at least five inches in diameter, on the side of the head, exposed large portions of the temporal and parietal bones. The squamous suture was as clearly seen as in a well-prepared cranium for lecture, and the circumvolutions of the wheel had left a distinct and deep track upon the parietal. Upon being asked how it was possible that he could have been reduced to such a state of helplessness as to lie quietly on his dray while he felt the wheel grinding off his ear, he very coolly replied, while scratching the surviving ear; 'Why thin I'm thinking, your honour, that somehow or other I must have been purty well *tossicated* at the time; but I believe it was more the fault of this big coat o'mine, though faith, as you see Sir, *it* was sober enough any how. It caught the wheel or the wheel it, I wont say which; I was dragged on one side, my hat fell aff, and the wheel ground the ear aff o'me entirely!"

Much as we admire the ardour and the feeling of our brethren of the Green Isle, perhaps it would be well to sacrifice a little to sober perspicuity. They might reflect that, although an individual case, related in this graphic and easy manner, might excite a smile, and charm into perusal the unwilling scholar, yet that general medical literature of such a character would become most diffuse, most trifling, and most wearisome.

The remainder of the case which has illustrated these remarks, presents very little to detain the reader. Erysipelas followed the injury, and pain in the head, with a countenance expressive of internal distress, succeeded to the erysipelas, the patient was at times delirious, and complained of a sense of weight in the præcordia. These symptoms were relieved by mercury, given to the extent of affecting the mouth. The exposed bone subsequently exfoliated, but the wound healed, and the patient did well.

The sixth case is short, and may be

given for the purpose of shewing the general character of the treatment recommended by Mr. Carmichael. It is such a case as probably occurs very frequently to all surgeons or physicians engaged in practice.

"Richard Hamill, aged 42, of an unhealthy aspect, was admitted 25th June last, into the Richmond Hospital, under Dr. Hutton's care. At the time of his admission he was unable to stand for any length of time, and tottered like a drunken man when he attempted to walk, so much so, that he had frequently fallen during the previous five weeks, the period of his illness. He had constant vertigo. His vision was very imperfect, objects appearing double, indistinct, and magnified. He complained also much of noises in his head. The sense of feeling was also injured, as well as the muscular power; for he was incapable of grasping any object firmly. The treatment adopted was general blood-letting, purgatives, and counter-stimulants to the neck, and the shower-bath.

On the latter end of June, in going through the wards, I saw him for the first time, with Dr. Hutton, and we agreed to put him under the influence of mercury. One grain of calomel was ordered three times a day, and a tartar-emetic plaster to the back of his head. Under this plan, his amendment was decided and rapid, and he was discharged convalescent, on the 13th July, able to return to his work, that of a harness-maker, in the firm of an extensive coach-factory."

We imagine that there are few good practitioners in this country, who would not have adopted nearly similar treatment in a similar case. General bleeding, used with discretion—purgatives, especially of the mercurial kind, abstinence, rest, with cupping and counter-irritation, are the means very commonly and very effectually employed. If these means failed, mercury to affect the system would in all probability be resorted to, as it was by Mr. Carmichael.

"In the treatment of inflammatory affections of the brain and its membranes, next to blood-letting in efficacy stands, in my opinion, the mercurialization of the system. The beneficial effects of this process in stopping the progress of inflammation of membranous parts, is most satisfactorily demonstrated every day by the exhibition of mercury for iritis. Frequently in this affection, the pain, change of colour, and depositions of lymph on the iris, occasioned by the inflammation, begin to disappear even before the mercury has had time to evince its usual effects on the gums of the patient. Perhaps other agents may exert an equally specific (I use the word for want of a better) effect upon other membranes. Thus there are strong grounds for believing that terebinthinates exert a peculiar influence over inflammation of the mucous membranc, a familiar example of which we have in the effects of balsam copaivæ in gonorrhœal inflammation of the urethra; and I may also adduce the effects of turpentine in reducing the inflammation of the uterus and intestines, which attends, or rather constitutes, puerperal fever. But to return to mercury. This powerful instrument has not been made use of as it ought, for inflammation which succeeds to injuries of the head, and for which the trephine is so often vainly employed for the purpose of giving exit to matter, when the symptoms of a compressed brain follow those of inflammation, and which, in 99 cases out of 100, is found beyond the reach of operation, to be extensively diffused between the pia mater and arachnoid coat."

We have on several occasions directed particular attention to the employment of mercury, in the inflammation of the brain and its membranes that succeeds to injuries of the head. Our readers will find many practical remarks on this subject, and some instructive cases, in the reports from the Glasgow Infirmary, which have been reviewed in various numbers of this Journal. In the employment of mercury, then, in these circumstances, we cordially agree with Mr. Carmichael. The particular symptoms that call for its administration, and the extent to which it should be carried, must be left to the experience and the judgment of the surgeon.

But there is another point on which

we do not agree with Mr. Carmichael. The following passage contains the opinions from which we dissent.

"In all surgical writers on the subject, we find futile attempts to establish an accurate diagnosis between the symptoms of concussion and compression. When a blow is inflicted on the head, more or less concussion of the brain must take place, whether or not the violence has been sufficiently great to rupture a blood-vessel on the moment. If a vessel should have been ruptured, giving rise to compression, the patient's symptoms are attributable to both causes. But concussion is always followed by more or less of inflammation or increased vascular action, and this inflammation, if not checked, may produce depositions, attended by coma, and all the symptoms of a compressed brain. The attempted diagnosis is therefore of no practical utility. The treatment is the same, except, perhaps, in the very rare instance, when the middle artery of the dura mater happens to be ruptured, in which case the immediate application of the trephine may be of use. It is needless to observe, that the preceding observations do not apply to cases of a depressed bone, where the cause of compression is obvious."

This doctrine appears to us to be equally dangerous and futile; the logic is as inconsequential as the practice inculcated is pernicious. Mr. Carmichael argues, that because every violence sufficient to produce compression must also have produced concussion, and because concussion is liable to be followed by inflammation, and the inflammation to produce effusion and consequent compression, therefore the diagnosis is of no practical utility. How impotent this conclusion is, and how imperfect the premises, is shewn at once by this obvious reply. Although it may be true that compression from injury may not exist uncombined with concussion in the first instance, yet concussion may occur independently of compression; and although concussion may end in inflammation, and inflammation in compression, yet concussion does not always end in inflammation, and when it does so, the symptoms of compression produced by inflammation are very different from those which are independent of inflammation. Mr. Carmichael remarks that his reasoning does not apply to cases of depressed bone, because there "the cause of compression is obvious." To Mr. Carmichael depression of bone may always be obvious, but all men have not the opportunities of that gentleman, nor his powers of using them. We are not ashamed to confess that we have witnessed cases, where depression of bone was not obvious, although it existed and occasioned symptoms. We have little hesitation in offering our opinion that the broad symptoms of concussion and those of compression are essentially different, that they are not in general difficult of distinction by experienced surgeons, and that the diagnosis is of practical utility. It is true that many cases are of mixed character, but the very commixture of symptoms is itself a means of diagnosis.

The following remarks on head-ache are not undeserving of attention.

"There is no more difficult point in practice than to ascertain, at times, when a headach is symptomatic or idiopathic, particularly as it is allowed that head-achs, which at first occurred from sympathy with the stomach or other parts, may, from long continuance and severity, produce inflammation and its consequences in the brain or its membranes, and thus become idiopathic. This is too extensive a subject to engage on, in a paper which has already exceeded its just limits. Where doubts exist, a close attention to the juvantia et ledæntia of regimen and remedies, will greatly assist us in arriving at a correct judgment. This much I must remark; that it appears to me that idiopathic head-achs, depending upon chronic meningitis, are more general than is usually imagined; and that we often amend or cure the disease with remedies exhibited for the purpose of acting on the digestive organs. Thus mercury, either given as a purgative or an alterative, may remove chronic meningitis, the head-achs be consequently cured, and the practitioner confirmed

a the truth of views which he had erroneously adopted.

Periodical returns of head-ache are sually esteemed nervous or sympathetic. But as it is the character of many ainful affections of the nerves and heir neurilema, to return at regular eriods, the same regularity is likely o occur in similar affections of the rain and its membranes. These affections often depend upon inflammaon, as is sufficiently illustrated in the ct that almost every one has experinced in his own person, of the periodical returns of tooth-ach, when the erve is exposed by caries of a tooth, nd thus with its neurilema consenently inflamed. The attacks of sciaca, a disease in which the neurilema f the largest nerve in the body has een often found on dissection thickenl by deposition of lymph, and to exibit other signs of inflammation, are remarkably periodical and regular in their turns, of which I, in my own person, ave had most woeful experience."

As Mr. Carmichael observes, it is tremely difficult to decide, in some ses, whether head-ach is or is not pendent on affection of the encealon or its membranes—whether it ould or should not be treated by tocs. Besides the attention to the juntia and ledæntia recommended by Ir. Carmichael, we would advise a rict inquiry into the state of all the nctions. If there is any thing wrong, e cannot do ill in setting that right, d when the tongue is clean, the setions all natural, the functions prorly performed, we may begin to conder carefully our further line of prace. As a general rule, the headachs the elderly and of the very young, e more frequently connected with inmmatory action within the cranium, an those of individuals between these tremes of age.

Mr. Carmichael speaks highly of the fects of the counter-irritation, by the ntment of tartar-emetic. All practil physicians and surgeons will agree ith him. Blisters and the tartar-eme, having a very different kind of acn on the skin, appear to be adapted different diseased conditions. Blisters occasion a large secretion of serum, and they generally answer best in inflammations of the serous and synovial membranes, after vascular depletion has checked, in a great measure, the vascular action. The tartar-emetic, on the other hand, agrees best in those chronic cases, where there is not such a tendency to serous secretion, and where, probably, the inflammatory action has a tendency to more destructive terminations. An interesting paper might be writen on the various modes of action of counter-irritants, the states to which they are applicable, and the diseased conditions they are severally best adapted to remedy.

We trust that no apology is necessary to Mr. Carmichael, for having criticised his opinions freely. He has himself exercised, and rightly exercised, a similar freedom towards others, and we feel assured that he appreciates the advantages of unrestrained discussion. For Mr. Carmichael's talents we entertain a high respect, and his work on the Venereal Disease is sufficient to stamp him as at once ingenious and bold. We hope to see more communications of his in our excellent contemporary.

XIV. Principles and Practice of Obstetric Medicine. By David D. Davis, M.D. &c.

[Parts XXI. and XXII.]

Nymphomania.

The fasciculi before us are principally occupied with the consideration of nymphomania. Disgusting and melancholy as the subject is, we believe that many erroneous notions on the nature and the treatment of the disease prevail, and, consequently, that a few pages devoted to its consideration are not altogether misemployed.

There cannot be a question that nymphomania is, in general, a symptom rather than a substantive disease. In the recent work of M. Dugés and Mad. Boivin, this view is embraced, and a very small space is allotted to the consideration of the malady. But, although this is generally true, it is probably not

universally correct. A defective moral education, the influence of bad example or of prevalent corruption of manners, and particular circumstances affecting the passions of the individual, may give rise to the nymphomaniacal fury, independent of any thing which deserves to be regarded as local disease.

Unless we permit this view to be taken, we shall find it difficult to account for the greater prevalence of the affection, at one time and in one class, than at another time and in another class. The astonishing extent of prostitution, of every description, that was witnessed in the Roman Empire, under the imperial sway, may justly be considered as a species of nymphomania. Dr. Davis himself indulges in this supposition. He quotes the cases of Cleopatra, and of Messalina, "the beautiful empress of the weak and cruel Claudius." The "incomparable prostitutions" of the former, excited the amazement and fed the suspicions of Marc Antony, who, in a letter to Soranus, his physician, would seem to have hinted their dependence on disease. The lust of Messalina has been unhappily immortalized by Juvenal and Pliny. Verse and prose have consecrated the feats of this votary of Venus.

"Tamen ultima cellam
Clausit, adhuc ardens rigide tentigine vulvæ,
Et resupina jacens multorum absorbuit ictus,
Et lassata viris necdum satiata recessit."

Such is the damning, yet glowing description of the poet, whilst the philosopher bluntly remarks—"die ac nocte superavit quinto et vicessimo concubitu."

Had these instances been rare, they might safely have been considered cases of disease, and the philosophical historian would have gladly thrown the extenuation of bodily infirmity over the apparent vitiation of the mind. But they were not rare, and each succeeding emperor and empress would seem to have vied, in debauchery, with their ancestors and with each other. Faustina, the wife of the stoic Marcus Antoninus, an admirable Roman and a tender husband, was celebrated for her sensuality. *Conditiones* sibi et nauticas et gladiatorias elegit. A historian, Lampridius, explains the sort of merit that Faustina chose, and the conditions she exacted. What those conditions were, may perhaps be surmised, by reflecting on some of a similar character, which recommended those who could comply with them to Elagabalus. A dancer, a charioteer, and a barber, were promoted to offices of state, and introduced to the special favour of the sovereign, *enormitate membrorum*. We need not pursue the catalogue of queens, whose royalty was distinguished, in the period of the decline of the Empire, by the incredible excess of their venereal appetite. We repeat that a few and scattered instances might charitably and profitably be laid to complaints of the generative organs. But when every page of history is a record of lewdness, and appears little better than the chronicles of the brothel, we fear that the physician must abandon his claim to the case, and all must admit that the disease was of the mind, and that luxury, illimitable power, an enervating climate, and a foul religion, were productive of nymphomania on an imperial scale.

It must not be forgotten, that the female sex was not alone infected with this terrible abandonment of prudence and morality. The excesses of Faustina and Messalina were more than matched, by the beastly orgies of Commodus and Elagabalus. The decent remoteness from ordinary associations, enjoyed by the terms of a dead language, will scarcely serve to cover the astounding infamy of either of these princes. The latter was publicly married to men, and gloried in the title and the social position of the female—the former is faintly described in the Augustan history. Sororibus suis constupratis. Ipsas concubinas suas sub oculis suis stuprari jubebat. Nec irruentium in se juvenum carebat infamiâ, omni parte corporis atque ore in sexum utrumque pollutus. In either sex we observe, at this epoch, the same shameless depravity, the same disregard for instinct and reason, for the obvious intentions and commands of God, and the feelings and institutes of man. It was not, alas, nymphomania, but utter dissolution of morals.

We do not therefore agree with those who, like M. Dugés and Mad. Boivin, look on nymphomania as always a symptomatic, and never a substantive affection. We cannot doubt that a naturally libidinous temperament may confer a disposition, which habitual indulgence, with the absence of those restraints that modesty, society, and religion impose, may eventually confirm: nay we think it highly probable that many of those conditions of the vagina and uterus which have been adduced with confidence as causes, have really been consequences of the malady.

We now return to Dr. Davis, and to the physical history of nymphomania. Pruritus of the external organs is a well known cause of nymphomania. This pruritus is said to be sometimes occasioned by ascarides in the rectum. The following case would seem to prove that irritating injections into the rectum will occasion nymphomania itself.

Case 1. Catherine B., æt. 58, of a sanguineous and highly irascible temperament, became the subject, about the period of the cessation of the menses, of an herpetic eruption, together with a very troublesome pruritus of the external parts of generation. Soon after its first appearance, its symptoms yielded to a regulated regimen and suitable medicines; but in about two years afterwards they again returned. The patient, on that occasion, consulted a herbalist, who engaged to effect a radical cure of her complaint. For that purpose, he made use of injections consisting of certain preparations of drastic plants, such as of the hedge hyssop and asarum. The two first of these enemata produced copious evacuations. What effect was, however, accompanied by an exceedingly troublesome itching of the genitals. The third excited an insatiable desire for sexual intercourse, and was followed by very profuse evacuations, with faintings. A fourth produced another morbid affection: deglutition became impossible, and the approach of fluids seemed to have the effect of closing up the throat, and of exciting a sense of suffocation; the patient, in the mean time, complaining of a burning heat from the throat down to the epigastrium. The horror of liquids became more and more distressing, until at length the very sight of them caused convulsions. During the subsequent night, the patient experienced several paroxysms of phrenitic delirium, and on more than one occasion she manifested a disposition to bite. On the third day she was observed to discharge great quantities of saliva; the pulse was small and intermittent; the extremities became cold, and after a lapse of a few hours she expired.

Certain articles of diet, cantharides, pessaries, are said to have occasioned the disease. Whilst on this part of his subject, Dr. Davis introduces a case communicated to him by Dr. Lucas, of Brecknock, in which that gentleman was obliged to extract from the cavity of the *uterus*, the stock of the spindle of a spinning-wheel. An incision of the os uteri was necessary to complete the extraction of the foreign body. Our readers may call to mind cases in some degree similar. We are not aware, however, of any in which foreign bodies of any magnitude had got into the *uterus*.

Worms in the uterus have been supposed, indeed asserted, to be among the causes productive of nymphomania. Checked perspiration, menstruation, &c. have also been regarded as causes; but it is difficult to conceive that they could prove adequate to the effect. The suppression of the catamenia may perhaps be excepted, for alterations of that function and secretion exercise a most important influence upon the female. A case in point is quoted by Dr. Davis. The nymphomania was periodical, and ceased on the re-establishment of the menstrual flux. In some instances the tendency to the disease would appear to be connate.

Case. "A child was addicted even at three years of age to gross personal habits. As she grew up, her disgusting propensities grew with her, and became more and more intolerable. Her parents made an early arrangement for

her marriage, and made choice for her of a healthy and robust husband. In due time she became pregnant, and for a short period subsequently was partially relieved from the importunities of her malady, without however experiencing at any time the ordinary amplitude of satisfaction incident to a frequent enjoyment of the privileges of the state of marriage. Her delivery, when her period of gestation arrived, was attended with great difficulty; or rather she died in the midst of the struggles of parturition. On exposure of the genitals after death, the clitoris was observed to be of the size of the male organ. The periods of greatest salacity of the subject of this miserable case had been those of the beginning and end of spring in every year; and at those times there emanated from her person a strong offensive odour similar to that of goats. Her inordinate propensities were represented as having been in some respects hereditary."

Enlargement of the clitoris is a well known accompaniment of nymphomania. In some patients who have died, inflammation and even sphacelation of the vagina and inferior portions of the uterus have been discovered. But these may be effects, as we observed before. In other cases, chronic disease of the uterus and its abdominal appendages has been disclosed. A case of the latter description has lately been published by Dr. Bright, and may be introduced here—it is quoted by Dr. Davis.

"Mrs. M., at the age of 74, became the subject of a most decided and violent nymphomania, with such aberration of mind, and such furious demonstrations of the peculiar turn of her feelings, as rendered it necessary, on several occasions, to subject her to personal restraint. She had been a stout, healthy woman, had been twice married, and was the mother of eight living children. During the continuance of this peculiar derangement, which lasted at intervals till her death, she was two or three times the subject of slight and transient paralysis, principally affecting the organs of speech; and she latterly became somewhat imbecile; and from being a remarkably active woman, became inert and listless; she lived, however, five years from the first attack of her ailments. Sectio cadaveris. The head was not examined; but the only disease discovered in the other cavities was a considerable calculus, apparently of cholesterine in the gall-bladder, and a peculiar and marked disease in the uterus. At the os uteri, and growing from it, was a tumour of a vesicular character, of the size of a large hazel-nut, containing a transparent fluid, and projecting towards the vagina. The cervix uteri itself was much thickened and hard to the touch, and on being cut through, two or three cysts of the size of peas were seen in its substance. About half an inch from the tumour just described, attached to one side of the uterus internally, another similar tumour arose, evidently composed of four or five cysts, parts of which were seen through the membrane which covered the whole. Having divided this tumour by cutting down upon it carefully, a cyst of considerable size was laid open in the body of the tumour, and from the bottom of that arose a globular vesicular body. Still farther along the internal cavity of the uterus might likewise be seen indications, though less obvious, of similar vesicles forming within the substance of the organ."

Two fatal cases are related by Dr. Bright and transcribed by Dr. Davis. The subject of the first was bled thirty times within six days. On dissection the clitoris was found enlarged, as were the ovaries. The fallopian tubes were sufficiently developed to lodge a full-grown pea-shell. In the second case the uterus, ovaries, and fallopian tubes were found in a state of acute inflammation. In another case, the right ovary was found as large as a man's fist, and contained a corresponding quantity of serum.

Dr. Davis enters into the consideration of eroto-mania, which he distinguishes, and very properly, from nympho-mania. In the former there may exist no excessive libidinous propensity; in the latter it is indispensable. A long, but a characteristic case of eroto-mania is related by Dr. Davis; we cannot afford space for it, but many

are to be found in the works of Esquirol and others.

It is difficult to say where the passion of love ends and mania begins. A female, for instance, disappointed in an attachment, refuses all intercourse with her family and the world, rejects food and medicine, and in a short time dies. Another commits suicide. A third becomes maniacal. A fourth is attacked with nymphomania. We leave those who can, to decide what are and what are not the legitimate effects of unrequited or unhappy passion, and what the result of disease. Certain it is that a female may die of love, who evinces no other symptom of mania—that erotomania may exist independent of inordinate desires—and that nymphomania is not necessarily attended with any perceptible aberration of intellect. On the other hand, it is equally certain that the barriers between these states are not always evident.

We proceed to a consideration of no mean importance, the treatment of the disease. This is clearly divisible into two portions—the moral and the physical. Dr. Davis divides it into that of the sentiment and that of the sexual passion. We confess that the distinction does not appear so obvious to us as to its author, and we find it difficult to reduce his cases and his doctrines into a very consistent epitome. He commences with the treatment of disappointed love, and as we have no other nor better to offer, we subjoin a sketch of the Doctor's.

He observes that one of the earliest and most prominent effects is a loss of the power of sleeping, and great cerebral excitement. As the lover cannot be procured, a substitute must be discovered, and that is opium. Nothing less than from two to three grains, or an equivalent quantity of the other forms should be prescribed, and a third or a fourth of this should be continued every four or five hours till sleep is procured. In most cases of preternatural cerebral excitement, it should be made a question whether the abstraction of fifteen to thirty ounces of blood should not precede the exhibition of opium. As a good accompaniment to opium, a pretty ample dose of calomel or blue-pill may, in many cases, be added. Such is the Doctor's methodus medendi. We fear that the physician is generally at a discount in these affairs.

Leaving the management of "the sentiment," we come to that of the "passion," in other words, to that of nymphomania. As the causes of this affection are various, the first thing to be done is to discover that of the individual case. Dr. D. observes that, the circumstances that usually present themselves most prominently, are increased constitutional excitement and local phlogosis.

"To meet the important indication here proposed, an ample abstraction of blood will naturally suggest itself to a judicious practitioner as a first and indispensable measure.

If the disease be recent, the first general bleeding should be such as to produce full fainting; and it should be afterwards speedily followed up by the application of leeches to the genitals. When it shall be practicable to convey these auxiliary operators high up into the vagina, and as far as the orifice of the uterus, a number of them not exceeding eight or ten might suffice for one time; see p. 311 and 389: but if that could not be done, and it were only practicable to apply them to the external genital surfaces, the application at least of twenty would be required in order to obtain an equal amount of depletion from the uterine system.

On the removal of the leeches the patient should be placed in a tepid or sub-tepid hip-bath; where she might remain with great advantage for several hours; the temperature of the water to be duly proportioned to that of the central parts of her person and to the excited state of her circulation. This part of the treatment, whilst it should promote a continuous bleeding from the leech wounds, would also most probably be followed by much diminution of excitement of the general vascular system, as also by a corresponding reduction of the morbid fulness and phlogosis of that of the uterus and its appendages."

In addition to these means, it might probably be necessary and useful to apply cold to the head, from which the

hair might be shaven. The bowels should be opened by a dose of calomel and jalap, and the remaining indication, on the practitioner's first day of attendance, would be the procuring of sleep by a powerful opiate.

"On the second and some of the succeeding days of the disease it would probably be necessary to have recourse to a repetition of several of the measures now recommended for the first day's adoption. The local bleeding, e. g. might be required to be repeated, as might also the use of the sub-tepid hip-bath.

To ensure a successful application of leeches, whether to the orifice of the uterus, or to the external genitals, it would almost always be necessary to place the patient under so much personal restraint as should prevent the possibility of her changing her position, or making use of her hands, whilst the duty was performing. The use of the strait-waistcoat has also been especially recommended in cases of this kind, to keep the hands from being improperly used in reference to certain propensities and peculiar importunities of the disease. Whilst leeches were being applied, the opportunity should be made available for examining with great accuracy the condition of the parts affected in order to ascertain first the amount and extent of their inflammation; and secondly, the kind, quantity, and if possible the precise source, of any morbid secretions which might be furnished by the phlogosed organs. If immediately, on the falling off or removal of the leeches, it should be inconvenient or otherwise unadvisable to have recourse to a repetition of the sub-tepid bath, as recommended among the items of the first day's practice, a very useful substitute might be found in the injection of full and repeated charges of cold water into the vagina, together with an occasional injection of the same fluid into the rectum. In cases of extreme phlogosis it might be prudent to attempt a gradual reduction of the heat of the parts by using first, tepid water to them, and then successively the same fluid in gradually reduced degrees of temperature. In cases of great offensiveness of the discharges, it might be exceedingly useful to syringe the affected surfaces two or three times daily with a moderately stimulant injection, consisting of equal quantities of decoction of bark, camphor mixture, and port wine. Under the more ordinary forms of inflammation of the same tissues, a solution of nitrate of silver in water, in the proportion of eight or ten grains of the salt to a pint of water, would furnish a better application. A reduction of the temperature of the parts within the pelvis has sometimes been attempted by a constant wearing and frequent changes of napkins charged with cold and evaporating fluids. It would appear doubtful whether and for how long a time the use of these and similar applications should be persisted in subsequently to the subsidence of the disease into a chronic form. The author knows but of one case which he can appeal to in illustration of the point in question."

Dr. Davis remarks that, in the first stage of nymphomania, vigorous and appropriate treatment may, with good reason, be thought likely to remove the disease, unless it depend on structural alterations. In the second stage a cure is less probable, but not hopeless. In the third, that of absolute fatuity, the chance of restoration is small indeed. Some further incidental remarks on treatment made by Dr. Davis, may be comprised in a few words—reduction of temperature about the central portion of the body—personal restraint by the strait-waistcoat or a flannel bandage constantly moistened—the face to be dashed with cold water on the manifestation of indecency—cool and country air—light and suitable clothing, with warmth to the feet—vegetable and unirritating diet. On the moral treatment we need not descant. It must be suited to the individual case, and regulated by the judgment of the family and the medical attendant.

XV. ON SOME POINTS CONNECTED WITH THE ANATOMY AND SURGERY OF INGUINAL AND FEMORAL HERNIÆ, &c. &c. By G. J. GUTHRIE, Esq. F.R.S. &c. &c.

WE need scarcely say that whatever

falls from Mr. Guthrie is valuable and interesting. His great experience, his ingenuity, and his talents, combine to recommend any work of his to the notice of the public. We have seized the earliest opportunity of laying the substance of the present pamphlet before our readers. The able author informs us, in a short preface, that it was written nearly two years ago, and that he has deferred its publication to the present time, in the hope that the observations contained in it, might form a part of the first volume of the Transactions of the Royal College of Surgeons in London—a hope that has been disappointed.

Contrary to our usual custom, this notice will not be analytical. The chief object of the author is to offer a more correct description of the anatomy of inguinal hernia. Such descriptive writing cannot be analyzed. We must content ourselves with extracting such passages as will give our readers an accurate notion of Mr. Guthrie's views, connecting those passages as well and as clearly as we can. We may remark in limine, that the substance of the present paper was contained in the lectures delivered by Mr. Guthrie, in the Theatre of the Royal College of Surgeons, in February, 1831.

Mr. Guthrie commences by mentioning what always appeared to him a difficulty in comprehending the cause of stricture in some cases of inguinal hernia. If it were commonly admitted that the inner opening through which an inguinal hernia proceeds, were surrounded by muscular fibres, there would then be no obstacle in accounting for the circumstances connected with the strangulation of the hernia. But such muscularity is not commonly described nor allowed, and Mr. Guthrie has long conceived that it is impossible, or nearly so, to explain the facts without it. He goes on to observe,—

"Before I was enabled to demonstrate the muscular structure of these parts, I had had the opportunity of examining the bodies of two persons who had died from strangulated herniæ, in both of whom the stricture on the intestine had been so great, that a common silver probe could not be easily passed in the canal of the gut. The last case was that of a person who had been operated upon, and died shortly afterwards; the intestine had been returned into the cavity of the abdomen, and was found lying behind the inner ring, with a narrow but deep indentation around it, marking the place at which the stricture had existed, and through which a probe could only be passed by dilating the contraction. I showed the preparation at my lecture, and declared, what I believe to be true, that this could only have taken place from some direct muscular pressure from without, and not from any congestion or dilatation from within or below the stricture. I also acknowledged that I could not shew, by dissection, in what manner this contraction had taken place, or by what parts it was effected. I have always, however, continued to impress upon the minds of the gentlemen attending my lectures for the last ten years, that the principal cause of strangulation in recent hernia was a contraction of the superior or internal opening of the inguinal canal, the cause and nature of which I could not satisfactorily explain, that it was, therefore, a point in anatomy deserving investigation, for a discrepancy of this kind could not exist in nature; and that there must be something defective in our knowledge of the subject."

To shew that he is not combating a shadow, Mr. Guthrie cites the opinions of various anatomical and surgical authors of eminence, on the nature of the inguinal passage and openings. These we need not quote; suffice it to say, that none describe muscular fibres, so disposed as, in any part, to encircle a hernial protrusion and contribute to its strangulation. We pass therefore to Mr. Guthrie's correction of former writers, premising M. Cloquet's description of the fascia transversalis, which is indispensable to the right understanding of Mr. Guthrie's.

M. Cloquet states, that it is an aponeurosis, the thickness of which varies: it springs from the posterior edge of the crural arch (Poupart's ligament), from the aponeurosis of the iliac muscle, from the external border of the rectus muscle, and is continued

upwards with the cellular tissue on the internal surface of the abdominal muscles: below and towards the middle of the crural arch this aponeurosis gives rise to a membranous canal, commencing by a wide opening directed backwards and outwards, the internal edge of which is thicker than the outer. This canal descends around the spermatic vessels, forming their proper sheath. The fascia transversalis supports the peritoneum, which is behind it, the epigastric artery passing between them. Before, it corresponds to the transversalis muscle, with the aponeurosis of which it is often so closely united that it can only be distinguished from it by the different direction of its fibres.

Again M. Cloquet remarks that, very often the fascia transversalis is evidently formed of two aponeurotic layers, which are united on a level with the top of the crural arch. Of these the anterior comes from the arch itself (Poupart's ligament), the posterior being only a continuation of the fascia iliaca, which quits the iliac muscle to ascend upon the anterior wall of the abdomen. These two layers thus re-united proceed back to back between the transversalis muscle and the peritoneum. It is easy to separate them on the outside of the superior opening of the inguinal canal; but on the inside and around it they are intimately united. When this formation is met with, the posterior layer passes usually behind the rectus muscle in its way to the linea alba, whilst the anterior one is continuous with the edge of the tendon of the rectus. The epigastric artery is sometimes posterior, sometimes anterior, and sometimes even between these two layers.

Mr. Guthrie thinks that this, which Cloquet considers an accidental occurrence, is really the normal condition, and that if the fascia transversalis be said to be composed of two layers, the anterior fibrous, the posterior cellular, much confusion will be avoided. Mr. G. goes on to say that, if the student is taught to consider the fascia transversalis as a sheet of condensed cellular membrane, divisible in some parts into two layers, passing upwards from Poupart's ligament to fortify the peritoneum, he will readily understand it; and if he is shewn that at a certain spot it becomes much thinner, and allows the spermatic cord to pass through, he cannot fall into any misapprehension. This part is not, however, an opening; it is merely the thin portion of the fascia which, as the testis escaped from the abdomen, was carried forward by that gland, and is now seen attaching itself to the spermatic cord. If this cord be drawn down, and an incision be made around it, close to where it is attached to the peritoneum, a sort of ring is formed, and if the finger be introduced, the thin part can be stretched or torn, until the firm internal edge of the denser anterior layer of fascia transversalis can be distinctly seen, having the epigastric artery a little to its inner side. The outer side of the ring is not so well marked, and the hole thus made by the finger is usually so large, and its outer edge so weak, as to occasion little fear of any great constriction being made by it on any portion of the contents of the abdomen which may be protruded through it. It is therefore not the part which constitutes the stricture at what is called the inner ring.

The following quotation will, we believe, give the reader an idea of Mr. Guthrie's views of the anatomy of the transversalis fascia and muscle. With it we must close this notice, recommending all to peruse the original paper. In addition to the descriptive portion, there are many practical hints of much value. We rejoice to see that Mr. Guthrie promises the public some farther contributions on surgical subjects. We trust that the promise will be kept.

"When the peritoneum is carefully removed from the inside of the wall of the abdomen, by tearing through the cellular membrane which attaches the one to the other; the fibrous or anterior layer of fascia transversalis is not the part next brought into view, but a distinct layer of cellular structure resembling fascia, although oftentimes loaded with fat, which can be readily dissected off in a complete sheet, carrying with it the epigastric vessels which adhere rather to it than to the fibrous texture in front. This cellular layer I take to

be the same thing as the posterior layer of Cloquet; but whether it is or not, it passes behind the rectus to meet its fellow from the opposite side, covers the iliac vessels below and passes under Poupart's ligament, forming their cellular and adipose sheath and the septum which passes between them. When this cellular layer is turned down, (as in Plate III. fig. 1.) the fibrous fascia transversalis is brought into view. If an attempt is made to turn the latter down from the transversalis muscle two inches above Poupart's ligament, it is often found to adhere very firmly to it, and to its aponeurosis. When muscular at this part, many of the fibres seem to be implanted on it, although both muscle and aponeurosis are sometimes wanting, in which case only can the spermatic cord lie upon the fascia transversalis. When the tendons of the internal oblique and transversalis muscles are complete and well marked, and they and the fascia transversalis are traced inwards to the rectus muscle, the two tendons are seen to pass in front of it very distinctly; the fibrous layer of the fascia transversalis on the contrary divides, the anterior and thickest part is attached to the anterior edge of the rectus; the other, which is very thin, passes behind the rectus to meet its fellow from the opposite side; but at the lower part close to the pubes, a portion of the fascia transversalis becomes very strong, and resembles, more than any thing else, a round white tendon going to be inserted into the pubes near its symphysis, and behind the rectus. The interspace formed by the recedence of the two insertions is very distinct, the rectus filling it up. The fascia transversalis passing externally from this sort of tendinous insertion, is attached to the inside of Gimbernat's ligament, of which it forms the internal layer, and is then continuous with the pelvic fascia. Passing from the upper edge of Gimbernat's ligament, or the third insertion of the external oblique muscle, to the inner edge of Poupart's ligament, or the second insertion of the same muscle, the fascia transversalis seems to adhere so strongly as to appear to be a reflection upwards from it, which is the view taken of it by the French anatomists: but if care be taken in making the dissection, it can with some difficulty be separated from it, and be shown to pass under the ligament to form the septum crurale, and the anterior part of the sheath of the femoral vessels. Exterior to the femoral artery the fascia transversalis is firmly attached to Poupart's ligament, and is continuous with the iliac fascia.

The transversalis muscle lies immediately upon the fascia transversalis. Its inferior edge is said to pass over the spermatic cord at the inner or superior opening of the ring, in order to form, with the internal oblique, the sheath of the rectus. This I believe to be in many instances an incorrect description. In the demonstration of these parts in the Theatre of the Royal College of Surgeons, I had the opportunity of showing (see Plate I.) the transversalis muscle advancing fleshy or muscular, until it reached the spermatic cord; a portion of it then took the usual course above and over it, whilst another portion passed below it, the terminating muscular fibres of which were inserted along the inner edge of Poupart's ligament up to the pubes. The muscularity of this insertion was admitted by the various teachers of anatomy, and other competent judges who were present. The lower part of the abdomen was thus shown to be defended by a layer of muscular and tendinous fibres, lying upon the fibrous layer of the fascia transversalis; and the spermatic cord passed, not, as it is usually stated, under the inferior edge of the transversalis muscle, but through a split in it originally formed for the purpose of giving passage to the testis. This split or opening was rounded on its under part where the spermatic cord rested upon it, and formed a small opening essentially muscular in every direction, and much less in size than that which is described as the opening of the fascia transversalis, which adheres to the internal surface of the muscle.

It is this part therefore, and not the fascia transversalis alone, which constitutes the inner or superior opening of the inguinal canal for all surgical purposes. The transversalis muscle

does not, however, in the generality of instances, send its inferior portion forwards and beneath the spermatic cord in so marked a manner. This part of the muscle more frequently becomes tendinous and aponeurotic; but its fibres, although tendinous, are distinctly marked, running transversely in continuity with the fleshy fibres of the muscle, and are inseparably united to Poupart's ligament. In some instances the muscular fibres of the transversalis do not take so oblique a direction from without inwards and downwards, but crossing more horizontally, send down a narrow tendon, on forming with the internal oblique the sheath of the rectus, which descends almost perpendicularly for some distance, to be inserted into the tuberosity or spine of the os pubis. The inferior or aponeurotic part of the transversalis may be equally present, forming the inferior edge of the inner opening of the inguinal canal; but this formation cannot take place if the spermatic cord passes immediately over Poupart's ligament, in which case, this ligament forms the under part of the inner opening of the inguinal canal, the lower edge of the transversalis muscle the upper, and the fascia transversalis the sides. The epigastric artery runs within a few lines of distance from the internal edge of this part or opening; and between this vessel, on the outside, the edge of the rectus on the other, and Poupart's ligament below as the base, the triangular space of Hesselbach is formed, through which that sort of hernia takes place, which is called *internal* by him, but *direct* by Sir Astley Cooper, to distinguish it from the more common one which, passing through the inner or superior opening of the ring, is called *external* by Hesselbach, and *oblique inguinal* hernia by Sir Astley Cooper.

When the transversalis muscle is inserted broadly into Poupart's ligament by its superior fibres only, the anterior ones pass on to form the sheath of the rectus, and to be inserted into the tuberosity of the os pubis; but a layer of fibres internal to these (the folded fibres of Sir Astley Cooper,) are implanted on the fibrous external layer of the fascia transversalis, and curve downwards to be inserted into Poupart's ligament, or proceed, according to Breschet, to form what he calls the pretended ligament of Gimbernat, and which he will not admit to be a third insertion of the external oblique muscle. These fibres are depicted by Cloquet (Plate I. fig. 3) as belonging to the fascia transversalis, and by Breschet (Plate III. fig. I.), in his *Considérations et Observations Anatomiques et Pathologiques sur la Hernie Femorale*, Paris 1819, as essentially going to form the internal layer of Gimbernat's ligament, of which the fascia lata of the thigh supplies the outer. They are very distictly shown in Plate III. fig. 1., and certain fibres running in a less curved and more vertical direction, belonging to the anterior or fibrous layer of the fascia transversalis, are equally well marked. These fortify this part in an especial manner, and something like the way in which the outer angle of the external ring is strengthened by fibres crossing in a similar manner."

XVI. CHARACTER OF THE ESQUIMAUX.

THE Phrenological Journal for September of the present year contains an interesting article on the peculiarities of this singular people, if people they deserve to be considered. The letter-press is accompanied with drawings of the skull of an Esquimaux, and of a Papuan, or inhabitant of New Guinea. In a table are contained the phrenological dimensions of twelve Esquimaux skulls, the originals, or the casts of which, are at present in the Society's collection. The table is too bulky for our columns, but we select a portion of it, representing the average size of the various organs in these hyperborean savages. The dimensions are as follow:—

Amativeness, 17½—Philoprogenitiveness, 18½—Concentrativeness, 15½—Adhesiveness, 14½—Combativeness, 16—Destructiveness, 15½—Secretiveness, 15½—Acquisitiveness, 13½—Constructiveness, 14—Self-esteem, 16½—Love of Approbation, 15½—Cautiousness, 15—Benevolence, 13½—Veneration, 16—

Firmness, 15½—Conscientiousness, 9½—Hope, 10½—Wonder, 10½—Ideality, 10½—Wit, 10½—Imitation, 11½—Individuality, 12½—Form, 9½—Size, 10—Weight, 9½—Colouring, 8½—Locality, 11—Number, 8½—Order, 8½—Eventuality, 10½—Time, 9—Tune, 9½—Comparison, 11½—Causality, 10½.

So much for the cerebral development. A brief glance at the character of these barbarians may not be totally uninteresting to the medical reader. Their mental peculiarities may be speedily summed up, and perhaps the following enumeration is a fair approximation to the truth:—extreme affection for their children—a strong venereal appetite, rendering prostitution universal, open, and unblushing—fearlessness of danger, and little distrust of each other or of strangers—improvidence in providing for future want, and reckless enjoyment of the present plenty—courage in the chase of the Polar bear, and little disposition to mutual contests—hospitality and meanness, conjoined with a disposition to dishonesty so notorious as to lend a hue to the Esquimaux race—and that remarkable contempt for Europeans and their arts, for civilization and its benefits, which has often stamped the most debased, most impotent, and most ignorant of mankind.

The latter feature has frequently exercised the reflection of the philosopher and the satire of the wit. The happy tale of the traveller in the Alps, so aptly conceived and so felicitously told by Goldsmith, is probably familiar to the majority of our readers. If the fictitious congregation of that story could burst into laughter at the absence of a goitre, it did no more than the Esquimaux or the American have done upon similar occasions.

"Superior," says Parry, "as our arts, contrivances, and materials must unquestionably have appeared to them, and eager as they were to profit by this superiority, yet, contradictory as it may seem, they certainly looked upon us in many respects with profound contempt; maintaining that idea of self-sufficiency which has induced them, in common with the rest of their nation, to call themselves, by way of distinction, *Innuee*, or mankind. One day, for instance, in securing some of the geer of a sledge, Okotook broke a part of it composed of a piece of our white line, and I shall never forget the contemptuous sneer with which he muttered in soliloquy the word 'Kabloona!' (European), in token of the inferiority of our materials to his own. It is happy, perhaps, when people possessing so few of the good things of this life can be thus contented with the little allotted to them."

A Tartar robber, seated, as Voltaire has happily expressed it, in a miserable hut, proclaims each day before he takes his meal of milk, that the princes of the earth have his sovereign permission to go to dinner. The meanest of mankind have ever been inflated with the wildest conceit, and Goldsmith has said well, that "the most ignorant nations have always been found to think most highly of themselves." The same extraordinary phenomenon is observed, and that not rarely, in the walks of civilized life. The ignorant are frequently most arrogant, most positive, most fraught with the notion of their own importance, and the littleness of all without their magic circle of self.

The moralist may grieve and the man of society may laugh at this strange perversity of human character; it is the part of the philosopher to analyse it and explain it. Unfortunately the investigation of the mind has been hitherto withdrawn from those best acquainted with its ordinary workings, and the cumbrous machinery of metaphysics has surrounded and protected mental philosophy, from the mass of the medical profession.

"The high estimate which savages form of their own importance, is undoubtedly to be ascribed to the activity of Self-Esteem, a faculty which, when 'powerful and ill-regulated,'—as it generally is, among uneducated and ignorant individuals,—'fills the mind with unbounded sentiments of self-excellence, without reference to merit.' The absence of that extent of misery which civilized nations are apt to look for in circumstances so wretched as those above described, may, we think, be accounted for, by attending to the constitutional qualities which savages seem

to possess. We have already seen that the Esquimaux are distinguished not only by moderate organs of the intellectual faculties and Ideality, but also by a lymphatic temperament, indicative of little activity of the nervous system, including the brain; and it is highly probable that the same constitution will be found to prevail among such tribes as the inhabitants of Terra del Fuego and New Holland. Now, as desire is the effect of, and in proportion to, the activity of the faculties, these savages, possessing feeble and sluggish intellectual powers and Ideality, have few or no desires thence originating; their moral and intellectual faculties are, as it were, half asleep; their sensations are blunt; and they suffer little uneasiness from exposure to influences which, in the case of men with active nervous systems, would be productive of acute suffering. As their means of gratifying desires are scanty, so those desires are few. 'Happiness,' in the words of Spurzheim, 'depends on the gratification of active faculties, and unhappiness on their non-satisfaction.' 'He who has many faculties active which he can satisfy, is more happy than he who has no desire whatever; it is, however, better to be without desire than to possess very active faculties, with no means of ministering to their cravings.'

The happiness of savages seems to consist more in the absence of disagreeable sensations, than in the experience of a variety of pleasurable emotions. Nearly the whole of their enjoyments have reference to their animal nature alone; their minds have no longing after unattainable felicity; and when the few desires which they possess are satisfied, they experience perfect contentment. Civilized man has many desires, to the cravings of which he frequently cannot administer; and, in consequsnce, he suffers misery.

If he could satisfy them all, he would have a greater amount of happiness than the savage at the limit of *his* felicity; for enjoyment is great in proportion to the number of satisfied desires. We have frequently expressed a conviction that the misery which at present scourges civilized nations is in a great measure the result of ignorance and folly; and that, by attending to the conditions prescribed by the Creator for the attainment of happiness, the amount of human suffering may be incredibly diminished. By the extension of knowledge, men will be enabled to regulate their desires to a much greater extent than is now practicable, and at the same time to provide more complete gratification to such desires as they possess."

If we look at this question without a particular reference to phrenology, we shall find little difficulty in explaining much of the vanity and happiness of barbarian tribes. Wants and wishes are chiefly the result of circumstances, and their origin, as their gratification, depends on the condition of the external world around us. There are some wants which are instinctive, and must be gratified. Such are those of hunger and of thirst, &c. animal necessities felt by the savage as the sage. But beyond a certain barrier all is artificial, the creature of the circumstances in which the individual is placed.

In civilized life, the country maiden, accustomed to see others situated like herself, has little desire, and scarcely a conception, of more than the homely fare and the rustic garb which her family and her neighbours are possessed of. But, introduced to the town, new objects present themselves and new desires arise. We may readily account for the content of savages under seeming privations, by reflecting that, to them, they are not privations, but really the enjoyment of all that they ever expected to enjoy. We may bring the case home to ourselves, by supposing a race infinitely more civilized, or more favoured by nature, than we are, looking down on our acquisitions and our happiness with equal surprise with that which we exhibit towards the Esquimaux.

It is not so easy to explain the pride of barbarians, and the obvious inconsistency of their contempt for civilization, and eager endeavours to acquire its gifts. It is probable that this feeling does not long subsist, and that acquaintance with the civilized ends is a more rational appreciation of their superiority. Such has been the case with the American Indians. We may partly

account for this feeling of vanity, by reflecting that savages are usually much courted and flattered in the first instance. The Esquimaux sees the white man come to his inhospitable clime, and he naturally supposes that some advantage possessed by it has brought the stranger to his shores. He sees little more than a handful of men deserting their homes, wherever they may be, to visit him, courting his friendship, and purchasing his comforts. It is not a matter of astonishment, that a hasty intercourse should impress him with satisfaction at his own condition, and pride at himself and his country being the object of attention.

XVII. Fatty Discharge from the Bowels.

A case of this sort has been related by Mr. Eastcott, Surgeon to the St. Pancras Parochial Infirmary.

The patient, a woman, æt. 48, was admitted into the Infirmary Feb. 5th, 1833. She had been a hard drinker, and was of very irregular habits. She had long been ill, and appeared to be suffering from organic disease of the liver. She had a greenish cast of countenance and was emaciated; complained of considerable pain in the right side and epigastrium; was subject occasionally to severe pain in the bowels; but what was more remarkable, she passed with her stools, which were very bad, and shewed a great deficiency of bile, a discharge resembling tallow, or spermaceti, or like a mixture of both, which floated on the surface of the urine in the vessel in considerable quantities. Was treated with hyd. c̄ creta in small quantities, leeches, and blisters, and supported with mild nourishment. She died Feb. 17th.

Dissection. "Lungs tolerably healthy, but effusion of serum into the cavities of the pleura—altogether about three pints. Liver soft, and somewhat large, of a pale yellow colour (the colour of Flanders brick), and its surface spotted with petechiæ. Gall-bladder transparent, not in the least degree tinged with bile, but resembled a particularly thin and well-washed bowel; it contained about two ounces of a thin fluid, more like bilious urine than bile. The colon very contracted—a mere rope; on its mucous membrane, which was very pale, and which was examined throughout its whole course, no trace of inflammation presented itself; the contents, except near the rectum, where there was some appearance of fæcal matter, was a whitish secretion resembling blanc-mange, and in other parts of it like thick rice gruel. I saw nothing like the matter which had been previously discharged per anum. An old adhesion existed between the omentum and gall-bladder. The pancreas was hardened, and changed in structure, and the pancreatic duct, which was enlarged, contained a number of solid chalky concretions as hard as bone, some about the size of peas, some larger, and resembling in roughness of their surface the 'mulberry calculus' of the bladder. The muscles were attenuated and pale; the cellular substance, particularly about the abdomen, anasarcous; and about two quarts of serous fluid were contained in the abdominal cavity."—*Med. Gaz. April.*

XVIII. Sarsaparilla and the Smilax Aspera.

Dr. Ashburner and Mr. Belinaye have communicated some observations on this subject to the Medical Gazette.* As we have seen a little of the effects of sarsaparilla, and something of those of the smilax aspera, we will notice the more prominent points in the papers of these gentlemen. And first of the physician.

Dr. Ashburner introduced the smilax aspera to the notice of the profession, in the number of the Medical and Physical Journal for March, 1831. He regrets that he has seen no published account of experiments with the drug since that period. The Doctor's additional experience, or rather the additional information which he communicates, appears to amount to this:—

1mo. A note from the Doctor's friend's friend, R—, "the surgeon of Tellicherry," to the following effect. "I have been putting smilax to another

* June, 1833.

use. I have had in the hospital three severe cases of venereal. I put them under a course of it. One took it macerated in hot lime-water; another steeped in cold lime-water; and the third in boiling water. All rapidly improved. The ulcers healed beautifully; and one of the patients, who came into the hospital an emaciated, poor, thin, dying devil, soon, under this medicine, became plump and fat." In addition to this, Dr. Ashburner assures the Editor that it has been his lot to observe plumpness and fatness, succeeding to a cachectic condition of body, under the use of preparations of smilax aspera, as well as of smilax sarsaparilla.

2do. After indulging in some reflections on the action of sarsaparilla, and advocating its utility in cachexia and cacocachymia, Dr. Ashburner makes these concluding observations on the smilax aspera.

"In most cases, the use of smilax aspera, like that of sarsaparilla, has been attended with a beneficial change in the condition of the patient, plumpness, clearness and strength, succeeding to emaciation, muddiness, and debility. To insure brevity, I forbear to quote cases in support of my positions, trusting that in time the experience of others will bear out the accuracy of the present report. My own mode of administering this medicine has been that which I originally employed—a pint of the decoction, or of the infusion, in the day. The decoction has been made by boiling a pint and a half of water upon two ounces of the root, one drachm of the extract of liquorice, and half a drachm of the subcarbonate of soda, until the fluid is simmered to a pint. The infusion has been made by steeping two ounces of smilax aspera in a pint of boiling water, or in a pint of lime-water, for twelve hours; straining, and adding to the strained liquor two ounces of the syrup of smilax aspera. This latter form of exhibition is convenient, and the flavour is very agreeable."

Such are the recommendations of the smilax aspera offered by Dr. Ashburner. The remainder are presented to us by Mr. Belinaye, a gentleman, who, acknowledging the Doctor's claim to the credit of bringing the remedy forward, congratulates himself on his having been one of those who have prescribed it most largely. Mr. Belinaye's statements are capable of being contained in a nutshell.

"Two years ago I happened to be called to attend upon a young nobleman, who, after a long course of dissipation, caught the venereal disease. Having taken large doses of mercury, he had to travel home in a great hurry several hundred miles, without this remedy being cleared away, or the disease being perfectly cured. In his peculiar weak state I thought sarsaparilla the best remedy he could use, and I prescribed it. Independently of my apprehension that common sarsaparilla may be a remedy 'qui amuse pendant que la nature guerit,' it is very subject to lay heavy upon the stomach, and to produce indigestion. In the above case the patient could bear it neither in its combination with the alkalies, nor with the mineral acids. Under these circumstances, the 'smilax aspera' happened to come under my notice, and I prescribed it to the complete restoration of the patient's health, who got remarkably fat and strong upon it, and has remained so for the last twenty months. From that time forwards I began to prescribe it frequently. In delicate persons I administered it in combination with one-eighth of a grain, more or less, of the oxymuriate of mercury, every night, and with great success in the cure of syphilis, and of its bastard forms.

The complaint, however, in which I have administered this new remedy most abundantly and successfully, has been gonorrhœa. If it be remembered how difficult gonorrhœa is to treat; that if energetic remedies be administered at first, such as cubebs, copaiva, and injections, the most distressing symptoms in the bladder, groin, &c. may show themselves; or if, on the other hand, gentle remedies be used, the disease frequently degenerates into interminable gleets;—if these circumstances be borne in mind, I think that the usefulness of any new remedy, capable of exerting a certain degree of positive effect, will be easily admitted. The following is the form in which I have prescribed the smilax aspera with

efficacy in gonorrhœa, nearly exclusively from the beginning to the end of the malady :—

℞. Liquoris Potassæ ℳxxx. ad ℨj. ; Aq. Flor. Aurantii ℨj. ; Syrupi Smilacis Aspera ℨv. M. Sumat cochl. ij. ampla ter quaterve in die e Cyatho Decocti hordei magno."

The whole of the question amounts to this. The smilax aspera is more cheap than sarsaparilla—is it as efficacious? It is a point of relative value. The public would suppose, that, to establish the equal efficacy of the two, or the superior merit of one, comparative facts would be related. The advocates of the smilax aspera might fairly be called upon to demonstrate its powers in one of the following modes—either to select cases in which sarsaparilla was peculiarly beneficial, and then by exhibiting the smilax aspera to shew its equally good effects ;—or, to going farther than this, to bring forward instances in which sarsaparilla failed, and the smilax aspera succeeded. The first series of experiments would go towards establishing the equality of the two—the last would display the superiority of the latter.

But this is not done by either of the advocates of the smilax aspera, and, what is singular, their statements would appear diametrically opposed on a very important point. The tenor of Dr. Ashburner's paper is manifestly in favour of the powers of sarsaparilla. He admits them, extols them, and would seem to lament that able provincial practitioners should doubt them. Mr. Belinaye, upon the other hand, is one of those sceptics, whose state of mind is virtually deplored by Dr. Ashburner. He expresses an apprehension that "common sarsaparilla may be a remedy, *qui amuse pendant que la nature guerit.*" It is strange, that two observers who start with such different views should arrive at the same conclusions, and it does seem impossible to us to reconcile the evidence of men who have not only no common standard, but whose standard is at opposite extremities of the scale.

We are therefore of opinion that the papers of Dr. Ashburner and Mr. Belinaye afford the public no opportunity of determining the relative virtues of sarsaparilla and the smilax aspera. They merely shew that this remedy has been employed by these gentlemen in certain diseases, with certain effects.

We may, probably, be permitted to take a slight glance at the results.

Dr. Ashburner employs the smilax aspera in the cases in which he would employ sarsaparilla, chiefly those of a cachectic character. The essential consequence observed by him is, improvement of the general health, displayed by the amelioration of the complexion and the acquisition of fat.

Dr. Ashburner's friend, the Indian surgeon, has given the smilax aspera in "three severe cases of venereal." The ulcers "healed beautifully" under the treatment, and one of the patients, who was thin, got fat.

Mr. Belinaye prescribes it, in combination with the oxymuriate, for the cure of syphilis and "its bastard forms," in delicate individuals. But his chief employment of the medicine, and its chief success, is in the treatment of gonorrhœa.

So far as our own experience goes, Dr. Ashburner's view of the probable value of the remedy is most consistent with the truth. Whatever may be the immediate action of sarsaparilla, its ultimate effect is to amend the general health, and the cases most adapted to it, and most improved by it, are those in which the general health is defective. But sarsaparilla is certainly not a specific for syphilis, and we therefore attach very little importance to the statement of the Indian surgeon, that three cases of the venereal were cured by the smilax aspera. What confirms us in this scepticism is the consideration, that "the venereal" is a term sufficiently comprehensive to include many cases not syphilitic, and that even if the sores of syphilis be healed, the malady is not of necessity destroyed.

When Mr. Belinaye treats syphilis in delicate persons, and bastard syphilis too, by the smilax aspera combined with the oxymuriate, it is difficult to say what portion of the result is owing to the one and what to the other. We are sure that syphilis in delicate persons is scarcely more curable by

sarsaparilla only, than is syphilis in persons of stronger constitutions, and probably the combination of the oxymuriate with bark, or with other tonics would be quite as salutary as its union with the smilax. It is difficult to pronounce what "the bastard forms" of syphilis are, and the expression is so vague that the treatment can neither be a subject of imitation nor avoidance.

We confess that we feel a little surprise at the reputed efficacy of the smilax aspera in gonorrhœa. We should have felt more satisfaction if particular cases of the disease had been related. We should then have been presented with some data, for calculating the probable amount of the value of the remedy. We confess that a glance at the prescription inclines us to attribute more to the alkali, the syrup, and the barley-water, than to the native virtues of the smilax aspera.

We have hitherto refrained from expressing an opinion on the relative efficacy of sarsaparilla and its rival. Yet our impression is, that the former is greatly preferable. We have tried the smilax aspera, and have seen it tried, with little or with no success, when the substitution of the compound decoction of sarsaparilla was productive of marked advantage. On the other hand, we have heard of cases, in which the smilax aspera was more beneficial than the sarsaparilla, and perhaps there are circumstances, with which we are unacquainted, that may render the former occasionally more beneficial than the latter.

XIX. Dislocation of the Head of the Femur on the Os Pubis, with Fracture of the Femur.

The following method of reduction was successfully adopted in a case of this description by Mr. John Bloxham, an intelligent surgeon of Newport, in the Isle of Wight. We should premise that no attempt at reduction was made for seven or eight days after the injury, short splints, with evaporating lotions, &c. being applied in the interim. At the end of the period we have mentioned Mr. Bloxham proceeded thus.

"The patient was laid on his back on the bed, and kept in that position by means of a sheet passed across the pelvis, and fastened to the bedstead; another sheet was also passed over the left groin, and secured in a similar manner. The dislocated and fractured limb was then enclosed in splints, one of which extended up the back of the thigh as far as the tuberosity of the ischium. Pulleys, which were secured to a staple in the ceiling, placed at the distance of a foot to the right of a point vertical to the patient's navel, were then attached to a bandage fastened round the splints, as high up as possible.

The foot was raised with the knee extended, so as to bring the limb nearly to a right angle with the line of the tackle, when, by drawing gradually on the cord, in the course of about ten or fifteen minutes the head of the bone was rendered moveable, and was brought considerably more forward. I then began to press on the head of the bone, so as to push it downwards, whilst the pulleys held it partially disengaged from the pelvis. In a few minutes the head of the bone passed over the ridge of the os pubis; and I then directed the foot to be raised a little higher, which, by putting the glutei muscles more upon the stretch, was calculated to render them more efficient in drawing the bone into its proper place. By this manœuvre the head of the bone was drawn backwards; and on the foot being more elevated, and the cord slackened, it continued to recede from my fingers till the trochanter major made its appearance in the natural situation, and the reduction was found to be perfectly complete.

Lest the head of the bone should slip backwards on the dorsum ilii, I directed an assistant to apply firm pressure during the latter part of the process, above and behind the acetabulum.

The apparatus was then removed, the thigh bound up in short splints, and the patient laid upon a double inclined plane. No symptoms of inflammation appeared afterwards about the joint. Passive motion was employed at the end of a week, and occasionally repeated during the whole reparatory process." *Med. Gaz. Aug.* 24, 1833.

II.

Spirit of the Foreign Periodicals.

Remarks on Small-pox, Vaccination, &c.

For the last ten years, the small-pox has been threatening once more to assert its desolating supremacy over the greater part of Europe. In various parts of Germany it had broken out with alarming severity, previous to 1829; and in the Summer of that year it appeared as an epidemic, short-lived indeed, but sufficiently dreadful, in the town of Annaberg and its environs, in the kingdom of Saxony. Such an invasion had not been known there since the year 1800, at which time vaccination was first introduced and generally adopted.

Dr. Otto, who has written a very able and elaborate article on the subject, very justly remarks that it is with vaccination, as with most other objects of man's pursuit and attainment, when once he has reached unto and enjoyed its benefits for some time, its importance becomes less and less valued; and a criminal negligence takes the place of a dutiful and an abiding gratitude. Many families had of late omitted to have their children vaccinated, and perhaps also not a few medical men had not diligently enough enforced the practice, or wisely provided in the performance of the operation for the security of their patients. We do not mean to deny that one year never passed, even when vaccination was most highly appreciated, and most judiciously practised, without some straggling cases of small-pox being known; but we at the same time most firmly maintain, that the two most potent causes of the recent epidemic have been, certain, although unknown, favouring state of the atmosphere, and a greater and a more generally diffused susceptibility to the disease, in consequence of a deficient and a faulty vaccination. Medical men are still a good deal puzzled what to think of the varioloid disease; and no doubt its appearance within the last ten years has added considerably to the difficulty of arriving at perfectly accurate intelligence on the influence which Jenner's discovery has had on the annual mortality of those countries into which it has been introduced.

Not only those who had been vaccinated, as well as those who had not, but also in many cases persons who had been inoculated, or had passed through the natural small-pox, sickened and died of this new epidemic; still we ought not to forget the very important testimony of Doctors Bell and Mitchell, that its virulence and danger in America were most conspicuously abated in by far the majority of the cases in which the patients had been previously vaccinated, whereas fully one-half of those who had not been vaccinated and had not had the small-pox, died of it.—Truly a mighty service of vaccination! Some physicians, among whom was Moreau de Jonnes of Paris, announced as their opinion, that the varioloid was a disease "sui generis," and that it did not afford any security against an attack of the true small-pox. He considered it as a probable importation from the East Indies.—*(Bullet. des Sciences Med. Dec.* 1826.)

Much confusion has arisen from not attending to the form and sort of the disease to which the term varioloid was affixed. Dr. Thomson, of Edinburgh, originally selected it to denote the mild and modified form of small-pox, which occurs in those who have been previously vaccinated; just in the same way as we use the words "alcaloid," "syphiloid," &c. to indicate as minor or less distinct species of alcalies and of syphilis. Tueffard, in his report of the Central Committee of Vaccination in France for 1817, used the appellation "Petite verole mitiguée."

To this meaning the term ought to be restricted; but of late, both in England and in America, and also in Ger-

many, *(Hörn's Archiv.* 1828,) physicians have made mention of wide-spread varioloid epidemics; and even the recent invasion of small-pox at Marseilles was by some reported as such!! It has been forgotten that spurious pocky epidemics were well-known, long before the time of Jenner;—*see the writings of Van Swieten, Heberden, Dimsdale, and Hufeland.* We shall there find that the true and spurious forms prevailed epidemically sometimes together; that both left pits and scars behind, but that neither of them afforded any security against an attack of the other. The spurious pox, we are told, runs its course more quickly, the pustules drying on the fourth or fifth day, and the body of the patient does not emit the peculiar small-pox smell. The two diseases are therefore essentially different. Dr. Otto has repeatedly witnessed cases which were mistaken by old and experienced practitioners for examples of genuine variola; and which he at once recognised as spurious, by their shorter duration, and by the absence of the characteristic smell. Two of these patients were seized with small-pox during the recent epidemic at Annaberg, and one of them died. We need not surely urge the great importance of an accurate discrimination. Without it we can never hope to arrive at any safe conclusions. In addition to the two distinguishing signs, it is right to observe that, in cases of varioloid disease, even when severe and when the pustules are confluent, the matter is never so completely formed; that it sooner becomes thick and dry; that the secondary fever is absent altogether, or is very indistinct, and that the pits and scars which remain are not nearly so deep nor so furrowed. As we might expect, there is a considerable difference in these respects, in different epidemics; and perhaps it is generally correct that the severity of the varioloid is in accordance with the malignancy of the co-existing small-pox epidemic. A very satisfactory proof that the varioloid (as previously defined) is only a modification of the true small-pox in consequence of the preceding vaccination, is afforded by the well-established fact that we can inoculate from a varioloid pustule a person who has not been vaccinated, nor yet has passed through the natural disease, and a perfect specimen of genuine variola may follow. It remains for future observers to determine whether the varioloid disease, "as such and retaining all its characters," can propagate itself to, and among those who never have been vaccinated.

The great practical question of the protecting influence of vaccination cannot be fairly disputed. The American and English writers have most forcibly illustrated its efficacy, and Roberts, in his account of the late small-pox epidemic at Marseilles, tells us that 1473 unvaccinated died of the natural disease, and only 45 vaccinated of the varioloid: besides we are to remember that by far the greater number of the vaccinated wholly escaped the infection.

Krausse has calculated that, before Jenner's immortal discovery, 400,000 were annually immolated in Europe by the ruthless monster of variola; and although the number be still very large, and has, no doubt, of late been on the increase, we impute this, not so much to the inefficacy of the antidote proposed, as to the remissness in employing it. Governments ought to view vaccination as a matter of state policy, and to render its adoption exclusive and obligatory. Till then, we cannot hope to effect very much good; for ignorance, indolence, and prejudice are a trio of formidable obstacles. Some of the German states, and among the rest, Saxony, have issued their official mandates in favour of vaccination, but have hitherto omitted to provide for the remuneration of the medical men who were expected to perform it. An adequate fund must be first established, and moreover, no persons should be allowed to vaccinate, except regularly educated and scientific men, whose knowledge may enable them to detect all sources of error, and to correct and obviate them. One of these, which has hitherto not been sufficiently attended to, is the existence of any morbid state, whether of an acute or a chronic nature, at the time of vaccination. From a very long and extensive practice, I

am quite satisfied that the agency of the cow-pox virus may be counteracted, not only by fevers and other pyrexial diseases, but also by a cachectic, scrofulous, or even by a very nervous and irritable state of body. The period of dentition is likewise unfavourable to its success. The vesicle will be found to be imperfectly developed, the crust to fall off more quickly than it ought to do, and the scar left to be neither deep nor indented enough. The age of the child ought also to be well considered: the first three or four months of infant life are occupied in the consolidation of its tender frame, and we therefore observe that, during that period it is very rarely affected by any epidemic or contagious disease. The best writers, as John, Baron, Billiard, &c. have all noticed the little susceptibility of infants to be affected by any of the acute exanthemata. Dr. Otto has never seen any child under four months of age have measles, or scarlatina; and during the late pocky epidemic in 1829, none so young were seized with it.

The observations of Dr. Percival of Manchester, and of Dr. Roberts of Marseilles nearly coincide with the observation of Dr. Otto, as the following tables of two epidemics will shew.

Patients under 3 months.....	4
——— from 3 to 6 months	17
——— from 6 to 12 months....	119
——— from 1 to 2 years	216
——— from 2 to 3 years	110
——— from 3 to 4 years	59
	525

And again—

Patients under 3 months.....	27
——— from 3 to 6 months	38
——— from 6 to 12 months....	144
——— from 1 to 2 years	200
——— from 2 to 3 years	185
——— from 3 to 4 years	190
	784

The occasional occurrence of small-pox during fœtal life, and also from the birth is a curious fact; but it does not at all invalidate our position, that infants are very little susceptible of the infection.

The alarms occasioned by the recent increase of small-pox, and the consequent discredit which has to a considerable degree been thrown upon vaccination, has induced several practitioners to recommend the operation to be repeated after the lapse of a certain number of years, not only with the view of additionally fortifying the constitution against the variolous poison, but also at the same time of testing the sufficiency of the first vaccination. It had been supposed that a tolerably correct opinion might be formed by examining the scar on the arm; but this has been found to be wholly erroneous. Dr. Otto has repeatedly had cases of severe and even fatal small-pox in those whose arms presented a most distinct and well-marked cicatrix, while others in whom the traces were little obvious, have wholly escaped. As to the question, whether the protecting influence of the cow-pox remains only for a period of years, and not for the life of the individual, and whether it requires therefore an occasional renewal, we cannot, in the present state of our knowledge, accurately determine. It seems more probable that the influence of the unfavourable agents, which we have previously alluded to, namely, unfitness of age, existing diseases, or a diseased constitution, dentition, and so forth, operating at the time of the vaccination, may have thwarted the full efficacy of the antidote.

We must therefore satisfy ourselves with carefully collecting and comparing facts; and with this view we shall now lay before the reader the results of 189 "re-vaccinations" performed in the year 1829.

In 76 cases, papulæ, or inflamed elevated points only and without any appearance of a pustule or of a vesicle, were induced. Although there was no obvious exudation, a small crust was formed on the top of these; it fell off on the 6th or 7th day, and left no scar, nor any trace behind. In these cases, I consider that the influence of the original vaccination was in full force, and not at all impaired.

In 83 cases vesicles were formed; these were usually filled with a turbid, thick matter, on or about the fifth day; on the seventh or eighth day, they had become dry, and on the tenth, the scab fell off, leaving a very imperfect mark. Such an eruption bears a considerable resemblance to varicella, and as I regard it as a false or spurious cow-pox, I shall call it "vaccinella."

In nine of the cases papular elevations appeared about the third day; and like regular vaccine vesicles, were gradually filled with a serum, but dried and passed away more quickly, and without the formation of any purulent matter. More or less feverish disturbance accompanied their progress. On the falling off of the brown-coloured scab on the 10th or 11th day, a superficial scar on a red ground, remained. This eruption may therefore be viewed as a modified cow-pox, and as probably indicating the disposition of the individual to the varioloid disease.

In sixteen cases, perfect, and in all respects regular and well-formed cow-pox vesicles were formed, and were followed by the true pitted scar. In five other cases the vesicles were nearly as satisfactory. The conclusions which may legitimately be drawn from the foregoing statements are, that out of the 189 persons who underwent vaccination a second time, 76 may be considered as retaining completely, and in a full degree, the protecting influence of the cow-pox; 83 in a high degree; 9 in a doubtful and uncertain degree, and 21 as having lost it altogether. Of these 21, ten who had been all vaccinated in infancy, were between 10 and 15 years of age; 7 between 15 and 20; and 4 between 20 and 27 years. Some of these had been vaccinated at different periods of their youth, in their first, second, or third years. Hence it appears, that the smallest number is actually of those in whom the first vaccination was least recent. How shall we explain this? Is it owing to a better mode of vaccination, or a more efficient virus then employed? or is it to be attributed to a diminished susceptibility to the variolous disease, as we advance in years? As we before stated, the appearance of the old scar is quite fallacious, since it was well-marked in some of these 21 cases, and it was very indistinct in many of those who resisted the effects of re-vaccination.

Numerous cases of small-pox which occurred during the late epidemic at Annaberg, are detailed by Dr. Otto, but we deem it unnecessary to transcribe any of them.—*Hufeland's Journal, March.*

II. ON THE INFLUENZA AT BERLIN.

Dr. Hufeland, in the March Number of his Journal, alludes to the then prevailing epidemic influenza, or grippa, which subsequently, as all our home readers well know, extended itself to this country, and spread like a broad sheet over almost every hole and corner of it. The venerable German tells us that, since the year 1782, no epidemic has been known to seize so many persons; in many places, more than one-half of the inhabitants were affected with it. Both arose in Russia, and followed a south-westerly direction; both made a sudden invasion on a vast number of people in a place at the same time; both were of short duration, and were comparatively little dangerous; both affected chiefly the mucous membranes and nervous system; and in both bloodletting and depletory measures were hurtful. In Petersburg, there were at least 100,000 invalids; in Memel, whose population does not exceed 10,000, there were 8,000; and in Berlin, at the date of Hufeland's writing, upwards of 50,000 had been seized. It may be considered as a catarrhal fever, accompanied with, and followed by, extraordinary depression of the nervous energy for several weeks after the pyrexia has ceased. Mild antiphlogistic treatment and gentle diaphoretics have, in most cases, been sufficient to cure it, even in this "*blood-thirsty age*" of ours.

A correspondent from Konigsberg adds a few interesting remarks on the epidemic, as witnessed by him there. The Winter had been unusually healthy up to the end of the first, or the beginning

of the second week in March. The writer, as well as some other physicians, had, indeed, remarked that there had been, for some time previous, a tendency in most febrile complaints to a nervous or adynamic type; and this is quite in accordance with the history of other epidemics, as, for example, of the cholera: the influence of the stormy cloud is felt, before it breaks in its full sweeping force. The symptoms were at first smart pyrexia, with very severe headache, sneezing, sore throat, and violent cough, which was generally dry and harsh, at least in the beginning; the skin moist, and the tongue white. The feelings of general pain, weakness, and great depression of nervous power, were very remarkable. The fever generally abated in three or four days, but the patients were long of recovering their strength. The mortality occasioned by the disease was very trifling, if we consider the number of patients, and occurred chiefly among children, in whom bronchitis was developed. Almost every one in Konigsberg was affected with it, in a greater or less degree; some, indeed, very mildly, but still they had catarrhal symptoms. During its prevalence, other diseases were arrested, and seemed to slumber for the time; the sick lists presented nothing but influenza—influenza!! Commerce was frequently suspended, and churches had no clergymen to officiate in them. In the course of the second week, the disease became less severe; in some, the fever was absent—in others the headache, or the sore throat, or the cough, and so forth; but such patients were often much longer indisposed than those who had sustained a smarter attack during the first week; whether this arose from their taking less care of themselves, or whether the "potentia nociva" required a certain time for its maturation in, and expulsion from, the system, we cannot say. In the third week, the number of cases was very much diminished, and so disarmed now was the disease of its violence, as to receive the appellation of "grippine," a diminutive of "grippe;" in the fourth week, scarcely any new cases were seen. The mortality may be estimated by the following table:—We should premise that the average weekly mortality at Konigsberg is from 40 to 50 in Summer, and from 50 to 60 in Winter.

Deaths from 8th to 15th March..	43
——— from 15th to 22d	72
——— from 22d to 29th.....	105

The last is a greater number than has been known for many years, except when the cholera was raging. During the epidemic influenza of 1831, the highest number of deaths in a week was 96.—*Hufeland's Journal.*

III. Coincidence of Human Epidemics with those among Fishes.

In 1784, several of the Indian tribes in the state of Massachusetts suffered very severely from a pestilential disease; and it was remarked that, during its prevalence, all the "blue-fish" had disappeared from the sea on that part of the coast. What is singular is, that since that period they have never returned in any numbers; and previously so abundant were they, that the fishing was a lucrative employment.

Every one has heard of the extraordinary mortality, in the year 1789, among the haddocks off the shores of Norway, Scotland, &c. The journals of the day give ample accounts of it. Captain Steward, who commanded a vessel from Archangel, tells us that the sea was covered, for several leagues in extent, with the floating dead fish. Now during this time, several parts of Scotland were ravaged with a most malignant scarlatina and cynanche. The reader will find some very interesting details in Sinclair's Statistical Reports. One of the most memorable years, for the coincidence of several of Nature's dismal disasters, was 1756. Lisbon was rent to pieces; the island of Mytilene, in the Archipelago, was shaken to its centre; North and South America felt the heavings of a general earthquake, and Austo was literally annihilated. Ætna and Hecla were lighted up with double fury, and England, France, and other countries were ravaged by a formidable epidemic of pu-

trid sore-throat, and Constantinople and the East by a destructive plague. The same year was remarkable for the vast numbers of whales and other fish found dead on various parts of the ocean. Again, in 1775, the state of Connecticut, in North America, was visited by a very fatal dysentery and by a cynanche maligna; and the waters of the harbour of Welfleet, near Cape Cod, were so affected, that all the oysters died—*vide* Dr. Webster's interesting work. A similar mortality among oysters has been known to accompany severe epidemics of the yellow fever, as in the years 1793, 4, and 6. The old author Cedrenus relates that, during the dreadful pestilence which brooded over almost the whole earth, in the latter part of the sixth century, a vast quantity of fish died in many places; and we read in the Universal History of Magdeburg, and in the tenth book of Baronius, that "a pestilence which was truly most fatal to the human species, was no less so to aquatic animals; for the banks of rivers were covered with dead fish, which putrefied and infected the air with an intolerable stench." Nicephorus and Echard mention that there was a terrible mortality among whales, about the middle of the fifth century, when the Roman Empire, under the reign of Theodosius, was desolated by a plague. It was believed that these monsters of the deep had been battling with each other; but such glorious results of war appertain to man alone!!—*Alibert in Revue Medicale.*

IV. LARGE DOSES OF ANTIMONY IN PHLEBITIS AND PULMONARY HÆMORRHAGY.

An interesting paper on the therapeutic properties of antimonial medicines, given in large doses, appears in one of the May Numbers of the Journal Hebdomadaire. Few, in the present day, will dispute their strikingly beneficial effects in acute pneumonia. The testimony of Rasori, Laennec, Recamier, and Ribes leaves no room for scepticism, although the modus operandi is still a question of discussion. We are told by some that they are equally efficacious in arresting the progress of phlebitis; a drachm and a half of the white oxyde may be given repeatedly. M. Sanson has frequently employed it, and also the emetic tartar, in the dangerous inflammation of the veins which follows surgical operations. MM. Trousseau and Bonnet, the authors of this paper, have successfully exhibited them in a case of phlebitis, where the inflammation had seized both of the lower extremities of a young female, six days after her confinement; and also in two cases of puerperal metro-peritonitis.

Professor Recamier has treated the parenchymatous hæmorrhage of the lungs by antimonial medicines, with very decided benefit. A young woman had suffered from this malady for ten months, and had been bled 29 times. A variety of remedies had been ineffectually tried; but on giving large doses of the tartrite of antimony, she was speedily and permanently cured. A man, aged 40, was brought to the Hôtel Dieu on the seventh day of an alarming hæmoptysis, which had rather increased than abated after bleeding. Antimony was given, and in seven hours the bloody expectoration had ceased. The same treatment succeeded admirably in the case of an old woman, who had suffered repeatedly from attacks of pulmonary apoplexy, symptomatic of diseased heart. It is not, however, to be denied that, in other cases, we have failed.

In bronchial hæmorrhage, the effects of the remedy have not been at all encouraging.

In pleurisy, it has in our hands utterly failed; and in acute rheumatism it is of very doubtful utility. MM. Dance and Chomel contend that it is beneficial only when, and in proportion as, it vomits and purges; and this opinion seems to have been held by the older practitioners, for antimony is by no means a new remedy in rheumatism. There is much wholesome and sensible observation in the following extract from old Salmon's Praxis Medica, London, 1707:—"The first thing to be done is to give a vomit of tartar-emetic,

three or four days' time to re-
t; which being given a third
ı some hundreds, to my know-
has absolutely done the cure
ıt any other means. But if the
: be rebellious, and will not sub-
this, you may, after the vomits,
ro or three purges of the pilulæ
les, or those of Chalmatæus,
seem to take away the pains as
nchantment, as these pills mostly
:t, in some patients we have met
, they have been ineffectual. In
se, we have been forced to have
se to the aurum vitæ, or turpeth
l, which may be given in doses
n two to four grains, for two
together, intermitting two nights,
en repeating the doses for two
more; and thus continuing for
eight doses, till a gentle flux does
which does truly, and beyond all
neans, most effectually cure this
. I speak from a long and tho-
tried experience. But in some
s, where I would not have a sa-
ı or flux, I have given gentle and
g cathartics, in the intervals of
) and two doses; and these me-
have never found to fail."

Variola and Varioloid.

te report of the clinique of the
é Hospital, we observe that se-
:were cases of natural small-pox
ailed. They occurred in unvac-
persons; and were fatal in two.
of these, a copious eruption was
)n dissection, over the engorged
membrane of the air-passages,
eral ounces of a thickish puru-
atter flowed from them; the
died asphyxiated; the right
resented here and there patches
tisation. In the other case, a
nated suppuration in the pul-
parenchyma was found after
which had taken place on the
.y of the disease.
cases of the varioloid were ad-
—in one, a female, aged 22,
d been vaccinated when young,
whom the scars on the arm
o longer visible, the disease ran
its course in eight days: in the other,
a man aged 28, and never vaccinated,
the eruption appeared on the third day,
and terminated favourably in a week.
What is interesting is, that this patient
seemed to have caught the disease while
tending a younger brother sick of the
regular small-pox; and yet we cannot
hesitate to pronounce his own attack as
one of the varioloid, when we consider
its duration and progress. At the
Beaujon hospital we lately took notice
of a patient who was affected with va-
rioloid, and yet gave distinct and well-
marked small-pox to several others in
the same ward.—*Archives Générales.*

VI. Paraplegia in a young Female, cured by Nux Vomica.

A girl, aged 20, was admitted into La
Pitié on the 13th January, for a para-
plegic weakness of the lower extremi-
ties; she had ready command over the
muscles; but their energies were so
feeble, that she could not walk, nor
even stand erect, but for a few minutes;
the toes were in a constant state of ex-
tension; and upon any attempt to ad-
vance, the thighs bended upon the pel-
vis, the gait became unsteady and tot-
tering, the feet crossed and became en-
twined with each other, and she would
fall on the ground if not supported.
This loss of power was most marked
towards evening, and also during the
periods of menstruation. The sensi-
bility of the limbs was unaffected, and
her constitution sound in other respects.
The disease had commenced in her 11th
year.

The alcoholic extract of nux vomica
was administered daily in an enema;
the dose at first was two grains, and
gradually raised to five. On the fourth
day, the power over the limbs was
somewhat greater, and the catamenia
were induced, Latterly the strychnine
was given by the mouth in the form of
pills in doses of $\frac{1}{8}$, $\frac{1}{4}$, $\frac{1}{2}$, and 2-3ds of a
grain. In two months and a half she
was discharged cured.—*Ibid.*

VII. FREQUENCY OF CALCULOUS DISORDERS IN EGYPT.

Medical writers have frequently committed the error of asserting that calculous diseases are unfrequent in warm climates. The statement is perhaps true as a general, but not as a universal rule. In Egypt they are of common occurrence, as appears from the report of M. Clot Bey, who has operated forty times for the stone, since his residence in that country. Prosper Alpinus, in his treatise on the Diseases of the Egyptians, alludes to the frequency of urinary calculi; and attributes the predisposition to the irritation and weakness of the kidneys, induced by excess in venereal pleasures, and the more immediate cause of their formation to the sand in the waters which they drink. Most indeed of the patients are from among the inhabitants of Lower Egypt; a few, however, are from the more central division of the country. M. Clot has never seen a case among the Nubians or Abyssinians. The cause of this inequality, he thinks, may be found in the humidity of the air and the unwholesomeness of the water in Lower Egypt. The ground lies very low, and is frequently covered with stagnant muddy water, which is used by the lower orders as drink; the better classes have it previously filtered, and are thus more exempt from its injurious effects.

Egypt, like other countries, is infested with swarms of empirics who play on the credulity of the vulgar, by boasting of their infallible solvents for the stone. The people being ignorant and superstitious are easily duped by these charlatans, for every affection of the urinary organs is by them set down and treated as stone in the bladder; and no doubt many of the supposed cases (they never use a sound) get well under their treatment. There is another method sometimes employed by the Arabs, and that is, the forcible blowing of air into the bladder, and then sucking it out, while the hypogastrium is at the same time strongly compressed; the cunning dogs know full well that no stone can come out, and therefore conceal one in their mouths before they commence the suction; the patient is satisfied when he sees *a*, if not *the*, stone, and gratefully rewards the imposter. Lithotomy has however been long known and practised by the Egyptian surgeons; there are two methods in use; one is the perineo-vesicle, or nearly the Celsian, the other is the recto-vesical.

In both, two fingers of the left hand are carried deep into the rectum, in order to grasp and confine the stone, and to make it protrude as much as possible; a deep incision is then made directly upon it, and the fingers of the right hand are generally used as forceps to withdraw it. It must be acknowledged that very few patients die of the operation, although most of them afterwards labour under urinary fistulæ, or incontinence of urine.

The recto-vesical method is generally adopted; it is at once easy of execution; a large stone may be most conveniently withdrawn; and the risk of hæmorrhage is less than in any other. Many of the native lithotomists acquire great adroitness; they practise no other part of surgery; and the profession or trade is handed down from father to son, often for many generations.

The following is a translation of an old Arabic work, written eight centuries at least ago. "When you intend to extract a stone from the bladder, you should order a person to seize the patient under the shoulders, and then lift him up several times, shaking him heartily so that the stone may fall to the lowest part of the bladder. The patient should also be instructed to leap from a height, or to dance. He must then lie down, with his legs bent upon his thighs, and his hands secured below his knees, in order that the bladder may be protruded downwards. The operator is now to press forcibly upon the hypogastrium with the one hand, and with the other to examine the perineum if the stone can be felt. If he feels it, let him cut at once upon it; if he does not, one or two fingers are to be introduced into the rectum, to bring down the stone to the neck of the bladder, pushing it out to make it project; the assistant is now to keep the testicles

up, and the surgeon is to cut between them and the anus, inclining the incision outwards to the left hip in an oblique direction, in order that the opening be large and proportioned to the size of the stone. If the finger in the anus be still kept pressing upon the stone, it will probably now leap out of itself; but if it does not, then an instrument is to be employed to extract it. The operation being finished, some yellow powder is to be sprinkled on the wound, a compress is to be applied to it, and then a bandage, which is called a 'bride.' The patient must lie on his back, and endeavour to make water whenever he has the desire, in order that it may not accumulate in the bladder, for this would retard the healing. He ought to wet the wound frequently with a lotion of vinegar and rose water. On the third day the bandage is to be removed, and the wound to be dressed with black ointment. If the parts become inflamed and swollen, they should be anointed with appropriate salves, and the aperture is to be bathed and injected with an infusion of chamomile, or with melted butter, and if God wills, the patient will recover."

Out of the thirty-eight cases of lithotomy performed by M. Clot, eleven were cured from the 7th to the 10th day after the operation; sixteen from the 11th to the 20th; eight from the 22d to the 30th; four from the 32d to the 40th; and one from the 40th to the 50th day. He has lost only two patients, and three were discharged with vesico-rectal fistulæ.

The operator very modestly ascribes his great success to the fine climate of Egypt, which is favourable, he says, to the healing of all wounds; and also to the temperament and constitution of the people being little irritable and not easily excited. This remark had been previously made by many of the surgeons of the French expedition, and especially by Baron Larrey. In five of his cases M. Clot performed the recto-vesical operation; in three of these fistulæ remained uncured. He admits that the operation is exceedingly easy of execution, and that very large calculi may be conveniently extracted; but he has abandoned it for the rapheo-vesical method proposed by Vacca, and which he has performed eleven times; the stone is extracted at the most roomy part of the perineum; no important blood-vessel is exposed to the knife, and the rectum can with difficulty be wounded. The only serious objection which has been urged against it, is the danger of wounding the seminal tubes; but we should remember that they may be wounded in some of the other operations, and moreover that only one of them can be divided, the other remaining safe and perfect. Besides, may not a vas deferens, like any other tube, unite, after being cut across?—*Annales de la Medecine.*

VIII. On the Rhinoplastic Operation.

M. Labat, ex-surgeon of the Viceroy of Egypt, has contributed a humorous paper on the subject of Rhinoplastie, or the art of nose-making, to Broussais' Annales. We shall make a few extracts for the amusement of our readers. No deformity, we are told, is more disgusting than the loss of a nose. History informs us that the chaste Eusebia, abbess of the Monastery of St. Cyr, at Marseilles, and 40 of her nuns, cut their noses off, to save themselves from being ravished by the Saracens, who had gained possession of the town—a dreadful alternative! The English chroniclers relate instances of equal magnanimity on the part of some of their fair countrywomen, during the period of the Danish invasion. From Diodorus Siculus we learn that, by command of Actasan, the noses of all the inhabitants of Kistipoor were cut off, in order that these robbers and assassins might be known wherever they went; their town was afterwards called Nasica-Tipoor. Among the Egyptians, Greeks, and Romans, the loss of the nose was the punishment inflicted on adulterers; and, to add to ignominy, the injured husband had the privilege of being the operator. No doubt the incisions were, according to

the precepts of modern surgery, free and extensive! M. Labat was travelling through Egypt in 1824, and arriving at Foha, he observed a great number of people who had lost their noses. His guide informed him that the neighbouring district had long been infested with banditti, and that it was necessary to inflict a severe punishment upon such robbers as were seized, in order to intimidate the rest. The same penalty, was awarded, also, to adultery, that crime being considered as the arch or master-theft of all. Our readers may recollect the lines of the poet Musianus—

Si mœchis rasum mos esset tollere nasum
Multi per mundum sine naribus esset eundum."

The English Queen Elizabeth, noted for her large nose, ordered that all who spoke ill of her person or of her government should have their ears and noses cut off. Charles the 2d punished one of his noblemen, for some satirical observations, by the loss of his nose; and who has not heard of the notary's wife in Paris, who wreaked her vengeance on her husband's paramour, by tearing her nose clean away!

There are many curious details in the traditional history of the nose. According to Herodotus, it signified, in the symbolical language of the Egyptian ritual, a wise and cautious man. We know how highly the Greeks and Romans esteemed the long and square-pointed nose—"longus, quadratusque nasus," and many of their leading citizens thus derived their appellatives, as Ovidius Naso, and Scipio Nasica. The French language has borrowed many idioms from this most honourable member—thus, we say "*il a un bon nez*," to mean a discreet person; "*on lui a donné sur le nez*," a mortified person; "*se casser le nez*," an unsuccessful person; "aire au nez," to rail or ridicule another; and we even apply the terms "nasilard, nasiloques, homme qui parle du nez," to the poor unfortunates who are noseless altogether, following, no doubt, the practice of the scholiasts, who derive their "lucus a non lucendo." Travellers assure us that the Tartars squeeze and flatten their children's noses, for the sapient reason, that it is a great folly to have one's nose sticking out in the way of the eyes. Their neighbours the Brahmins, on the other hand, seem to have been the original nose-manufacturers. Galen travelled in the East, and gives us a description of the operation; the skin of the cheeks was drawn forwards, and, to facilitate the extension of the integuments, several longitudinal incisions were made in them, so that the flaps might be brought into contact with each other from either side.

Celsus recommends that the incisions be made close to the ears; and in other respects he follows the preceding method—"non creatur ibi corpus, sed ex vicino adduntur; quod etsi in levi mutilatione fallere oculum potest, in magnâ non potest." Baron Larrey has successfully employed the ancient operation in two cases—*vide* Journ. Complem. des Sciences Med. Mai, 1821, and the the 4th vol. of his works. The plan proposed by Dieffenbach, differs little from the rhinoraphy recommended by Celsus. That curious old boy Olaus Magnus, suggests the use of a piece of the flesh from a living fowl, as a substitute for the lost nose!! In the 16th century, two brothers of the name of Boiani, Neapolitans, acquired prodigious fame by their skill in repairing noses; unfortunately for poor Tycho Brahe, who lost his nose by a sabre-wound in a duel, they did not visit Denmark. In 1587, Tagliacozzi published a tract, entitled "Epistola ad Hieronimum Mercurialem de Naribus multo ante abscissis reficiendis;" and ten years after his "Chirurgia Nova de Narium, Aurium, Labiorumque defectu, per Insitionem Cutis ex humero." So proud were his fellow-citizens of Bologna of this celebrated rhinoplast, that they raised a statue to his memory, and in his hand he held a nose! The taliacotian cure was a very tedious and fatiguing one to the patient; for, as the flap which was to serve for the new nose was obtained from the arm or fore-arm, it was necessary that the upper extremity should be kept folded across the face, so that the bleeding wound on it, and the raw edges of the nose, be kept accurately in contact.

l perfect union had taken place; ıot till then, a period usually of 30 ı, was the radicle of the flap to be led. Tagliacozzi particularly re-mends that the nose be made large ıgh—"melius est amplas gestare s, quam imminutas et deformes." odification of the above operation tried by some surgeons. They e an incision through the integu-ts of the middle and anterior sur-of the fore-arm; they then made edges of the mutilated nose raw, applied them to this wound, re-ing them in accurate contact with ı other. At the end of 15 or 20 ı, when adhesion had taken place, triangular flaps were dissected ı the adjacent integuments of the -arm, and left hanging to the nose; e were then brought in apposition ı each other, forming thus a raphé, ridge of the nose, and retained by ıres.

ıraeff of Berlin, and the late M. pech of Montpelier, are the only lern surgeons who have practised old Taliacotion method of taking flap from the arm; they have each ed devised particular apparatuses the purpose of confining and retain-the arm to the head; but all the ntials of their operations coincide. Jraeff's first case it was little short ı twelvemonth before the new nose ı fairly completed; and then it was h a very curious nose, that the pa-t exhibited himself for money to the ıdering eyes of his compatriots. ı details are communicated in Hufe-l's Journal and in Baron Percy's k. His second case was that of a ng woman, who had lost her nose n a phagedenic ulcer. The flap was ected from the inner side of the ı, but left attached by its base; the edges of the nose and of this tri-ular flap were then united by means ıeedles and sutures, the arm being ssarily secured to prevent all move-ıts. Adhesion had so far taken place the end of the fourth day, that ıff removed the sutures; and in ı days more, he detached the base of flap from the arm; on the twenty-h he paired and fashioned it into a becoming shape, the apertures of the nostrils having been previously made and kept open by cylinders of cotton; and the cure was completed in a fort-night afterwards.

[*To be continued.*]

IX. Gastrotomy, in a Case of Extra-Uterine Pregnancy.

A negress at Pernambuco in Brasil consulted Dr. Benit in May 1830; she expected every day to be delivered; labour however never came on regularly, and soon all pains left her entirely. The swelling of the abdomen was as great as ever; and in course of time, the poor woman's health began to decline. In May 1832, an abscess formed about the navel, and some fœtal bones were discharged. Dr. B. then determined to lay open the abdominal cavity by an incision of three or four inches in length, and using his fingers as forceps he extracted the putrid remains of a decayed fœtus; the stench was most offensive. The edges of the wound were brought into contact, and the patient confined to a rigorous antiphlogistic treatment for two months. Ultimately she quite regained her health.—*Annales de la Med.*

X. Vaccination.

Professor Lobstein, of Strasbourg, has lately published an interesting history of the variolous epidemic, which prevailed during the year 1825 and 26 in the department of the Lower Rhine. At the present moment, when the stability of Jenner's great discovery seems to be doubted by many, it cannot fail to be instructive to know the sentiments of such an able observer as our author. The inferences he has drawn may be reduced to the four following.

1. That by far the greater number of those who sickened during the epidemics were unvaccinated, or those in whom vaccination had not succeeded.

2. That when the disease attacked those who had been successfully vac-

cinated, it was invarlably mild, and not unlike to varicella.

3. That the striking difference which was universally observed in the severity and fatality of the disease, when it occurred in unvaccinated, and when in vaccinated persons, can be attributable solely to the protecting influence of the cow-pox.

4. That therefore the cow-pox must be still considered as a most valuable, although not an infallible preservative against small-pox, and that when small-pox does supervene, it is usually mild and much modified.—*Archiv. Gener.*

XI. ÆTIOLOGY AND TREATMENT OF GANGRÆNA SENILIS. By DUPUYTREN.

A man, aged 71, was admitted last March into the Hôtel Dieu. For several days he had suffered from pain and a sense of coldness in the left great toe; it was swollen and rather livid; the pain got worse; a phlyctæna formed, broke, and discharged a brown-coloured fluid; and the subjacent parts were found to be mortified; the eschar extended to the meta-tarso-phalangeal articulation; it was hard and dry; the pain was now so severe as to prevent all sleep, and to induce feverish symptoms. The heart and great central vessels were ascertained to be healthy; the crural artery of the affected side at the groin felt hard, and was no doubt ossified.

The patient had no idea whence his disease arose; he had received no bruise; and his health had been previously very good.

Dupuytren being satisfied that this was a case of the senile gangrene induced by an obstruction, partial or total, of the arteries, in consequence of an inflammation of their inner coat, and a consequent deposition of coagula in their tubes, ordered a large venæsection; and emollient cataplasms at the same time to the toe. The patient experienced immediate relief, and slept comfortably that night.

A mild antiphlogistic treatment was continued, and in the course of a few weeks the eschar was thrown off, and the ulcer, although deep, shewed a beginning granulation. At the date of the report, every thing was going on well.

Observations. Medical men have hitherto pinned their faith too undoubtingly to the doctrines of Mr. Pott on the subject of the gangrena senilis;—indeed the very appellation is erroneous. Dupuytren has seen the disease in a girl of ten years of age, and in this case it extended up one half of the leg.

This eminent surgeon, after much patient observation, is now convinced that the gangrene is the result of a previous arteritis of the principal vessels of the affected part. Although it most generally commences at the very extremities of the fingers and toes, he has seen it appear, first of all, in some other part either of the foot or leg, as about the malleoli; and authors have described similar appearances on the trunk, on the nose, ears, &c. The upper extremities are not unfrequently affected, and Dr. Paillard mentions a case, in which the hand and lower half of the forearm had become shrivelled and dry, as we see in a mummy. The early symptoms are a feeling of stiffness, cold, weight, and heaviness in the part; then of tickling and pain, which is sometimes very lancinating and severe; the part becomes swelled and puffy, and of a purplish hue; at other times it is pale and shrivelled. One or more phlyctæna form, and when these break, the subjacent parts are found to be gangrenous, and, as it were, mummified. If the strength of the patient holds up, the disease gradually mounts higher and higher up the limb, and each step of advance is denoted by a repetition of the symptoms just now mentioned. As, is well known, by far the greater number of cases occur in old subjects; and hence probably the cause of ascribing the disease to ossification of the arteries; but this is now known to be, as Hodgson justly observes, only a coincidence; in truth, mere ossification of the blood-vessels does not very materially affect the circulation; and every anatomist is aware how frequent such

a change of the arterial tissue is in old people, without being accompanied by any traces of gangrene of the parts. The fact, too, of the disease occurring sometimes, although rarely, in young persons, corroborates this opinion.

The real and essential cause is an obstruction to the circulation; and this obstruction is produced by the vessels being clogged up with coagulated blood in consequence of the previous inflammation of their serous coat. Morbid anatomy has shewn the truth of these positions most satisfactorily. On examining the vessels, we find that the arteries are filled with coagula, which adhere closely to the tubes by means of coagulable lymph, which has been poured out, as happens so frequently with all serous membranes. These phenomena may, it is true, take place in ossified as well as in healthy and normal vessels, and not in one set only to the exclusion of the other. Cruveilhier has shewn that we may induce arteritis by injecting acrid substances into the vessels, and that mortification of the parts is a frequent result, in consequence of the circulation being interrupted;—by keeping this in mind, we can readily explain how the dead parts should become dry, withered, and mummified, and not putrid and boggy, as after an excessive inflammation.—How satisfactorily also can we now understand the occasional exciting causes of this malady; viz. excess in wine and spirits, rich living, certain poisons, especially the ergot of some grains; the blood becomes infected, and stimulates the arteries to inflammation. M. Roche has written an admirable paper supporting these views in the Dict. de Med. et Chirurg Pratiq. t. vii. art. Ergotisme.

Andral adds his influential testimony to the same effect. Consult his Precis d'Anatomie Pathology, t. ii. p. 373. Delpech, in a paper published in the Revue Medicale for July, 1831, admits that this sort of gangrene is the consequence of an obliterating inflammation of the capillary vessels.

Treatment. Every one is acquainted with Pott's curative means, bark and opium: the former is not only inefficacious, but is absolutely hurtful in most cases, and our experience confirms this condemnation.

An old woman, upwards of 60 years of age, was taken into the Hôtel Dieu, many years ago, and treated on Pott's plan;—the disease gradually extended itself. Dupuytren then ordered bleeding and other antiphlogistic means; and speedily the mischief was arrested. Since that time a great number of cases have been similarly treated with most gratifying success. Opium is an admirable adjuvant, but it cannot be trusted to alone.—*Trans. Medicales.*

XII. Pommade, to prevent the Hair from falling off.

Take of ox-marrow..... 6 drachms.
Almond oil..... 2
Powder of red bark 1

Add the powder gradually to the oil, blending them well together; then having melted the marrow over a gentle fire, mix and stir it with the other ingredients in a mortar, until it all becomes cold. Flavour it with any grateful aromatic.—*Bullet. de Therapeut.*

XIII. Extracts from German Literature.

In our last number we noticed some excerpta from modern German works, published in our esteemed contemporary of Dublin by Dr. Robert Graves, and we took occasion to observe that this gentleman was doing a service to the profession in this country by making them acquainted with what would otherwise be to them a sealed book. The paper we are about to notice was published before that which we alluded to in our last number. It is contained in our contemporary for May of the present year.

1. *A wonderful Heart.*

This wonderful heart (cor illud mirabile) occurred in a woman who had been subject to occasional attacks of rheumatic head-ache and arthritic pains,

but had otherwise enjoyed good health until some years before her death, when she became subject to a perpetual feeling of anxiety, often accompanied by palpitations of the heart and sudden fits of debility, preceded by transitory glows of heat.

On dissection, a large quantity of water was found in the chest.

"The heart, before the sac of the pericardium was opened, appeared natural in its size and position, but on cutting the pericardial sac, both the ventricles and auricles seemed somewhat smaller than natural. The external or fibrous layer of the pericardium was normal in its texture, whilst the serous layer by which it is lined internally, appeared much thicker than usual, and had altogether lost its natural transparency. That portion of the serous layer, which is reflected over, and embraces the heart itself, was neither thickened, nor otherwise altered in structure, and, as usual, adhered intimately to the subjacent substance of the ventricles, which were found degenerated into a fatty mass. The external surface of this reflected serous layer, was covered with *striæ* and *flocculi* of coagulable lymph, superimposed in a laminated manner, but easily removable, so as to expose the serous layer covering the substance of the ventricles just spoken of.

Between these two serous layers, viz. that lining the fibrous sac of the pericardium, and that reflected over the substance of the heart, was found a stratum of perfectly muscular substance (massa omnino muscularis). The extent of this muscular stratum answered exactly to that of the reflected serous layer of the pericardium, and, consequently, it covered the whole body of the heart, ventricles, as well as auricles, extending from the great vessels issuing from the base of the heart to its very apex. In estimating the relative actions of the muscular fibres composing this layer, it is necessary to recollect that on the different sides of the heart they ran in different directions, imitating in the most perfect manner the natural spiral course of the muscular fibres of the heart, and forming towards its apex a junction by means of a *vortex* of muscular fibres. When examined by a powerful microscope, these fibres were found to be composed of separate fasciculi, each again containing distinct minute bundles or parcels of still smaller fibres, just as is observed in true muscle. The muscular fibres were strong and powerful on the posterior face of the left ventricle, but still more so where they embraced the origin of the inferior vena cava, like a sphincter muscle."

We cannot but suspect that both Dr. Leowolf, of Heidelburg, the narrator of the case, and his translator, have attached more importance to it than it merits. It appears to us to be an instance of chronic pericarditis, and the reputed muscle to be nothing more than lymph, organized perhaps, but presenting appearances familiar to those accustomed to post-mortem examinations. A great deal of speculation on the extraordinary muscular apparatus is appended; but taking the view which we do of the matter, we think it somewhat unprofitable.

2. *Excision of the Articulating Ends of Bones.*

An enumeration of the operations of this description is presented by Dr. Leowolf. It can only be considered an approximation to the truth, indeed, it would seem in several particulars extremely incorrect. We refer the curious to our contemporary.

3. *Hypertrophy of the Mammæ.*

This affection has attracted little notice. Yet it is not very rare, and we have heard of a case in which it was indirectly a cause of death. This case occurred at St. George's Hospital, and was under the care of Mr. Brodie. The patient, a young woman, came up from the country on account of an enormous enlargement of the breasts, without any decided change of structure. The integument was accidentally abraded by a pin, erysipelas supervened, and it proved very rapidly fatal. As this is a disease (it may justly be considered such) of which little is generally known, we are induced to notice the

instances collected by the industry of the German author.

Case. A young woman, of a pale countenance, slender form, and phlegmatic temperament, had enjoyed an uninterrupted state of good health until her 25th year, when she became pregnant. It is remarked that her breasts were naturally large and soft. No unusual occurrence followed delivery, except that the child could not be brought to take the breast, and consequently the mammæ became distended with milk, and far exceeded their natural size. It is not stated whether they had regained their usual dimensions before she again became pregnant, about two years afterwards. Be this as it may, both had attained to such a magnitude before the sixth month of pregnancy had elapsed, that she sought medical aid, and informed Dr. Cerutti that about four months previously she had received a blow on the *right* mamma, shortly after which the *left* breast became evidently larger; but its enlargement was unattended by the least heat, pain, or any other symptom of local inflammation. In the course of a few weeks the right breast began likewise to increase in size, but not so rapidly as the left. When first examined, they were so greatly enlarged and heavy, that their weight alone proved a serious incumbrance to the patient; they were both equally hard, and the strongest pressure on them did not produce the least pain. The skin covering both was perfectly natural, and she complained of no uneasiness except occasional stitches darting through the left mamma. The enlargement of the breasts continued to increase until the end of the eighth month, when she was delivered of a dead child on the 15th of March, after which their size remained stationary, and the stitches in the left breast ceased altogether. After some time she commenced an alterative course of mercurials and antimonials, which seemed to improve her general health and made some impression on the breasts, for the right was evidently diminished in size. Both, however, were still hard, but in some spots the hardness was so far diminished as to yield somewhat to the finger when pressed. Under the same treatment these soft spots seemed to increase in size and number, and at last imparted an evident sense of fluctuation to the finger; at the same time her lower extremities, and afterwards the integuments of the abdomen, became œdematous, and in the course of a few days even her face and hands were somewhat swollen, particularly in the morning. The appearance of the œdema was accompanied by febrile symptoms, which, together with the anasarca, speedily yielded to antiphlogistic treatment. The left mamma had now become quite soft in every part, and in fact felt like a bladder full of water; its weight and the disagreeable fluctuation of the contained fluid rendered it extremely inconvenient to the patient, and accordingly it was resolved to let out the fluid, which was effected by means of scarifications made on the 14th of April, and repeated eight days in succession. This afforded exit to several pints of water, and caused so great a decrease in the size of the left mamma, that it was no longer much larger than the right. The flow of water through the wounds continued for several weeks, until, indeed, the appearance of the left breast was so entirely altered, that it now resembled a flaccid nearly empty bag, containing the mammary gland somewhat increased in size, and of a stone-like hardness. The alteration in the left breast was less perceptible, nor was it evident that it ever had contained any water; like the other, however, it too had become more flaccid. In neither did she feel the slightest pain even on pressure. The use of iodine ointment, and other remedies, had before the end of July effected a still further reduction in the size of her breasts, which, although still much larger than those of other women, and still exhibiting a remarkable hardness of the mammary glands, yet formed no serious impediment in the performance of her usual occupations. So matters continued for thirteen months, when she became a third time pregnant, and in the course of a few weeks the breasts again began to

increase in size, and that with such rapidity, that in the beginning of the following April, the left breast presented the following measurements: circumference at basis, forty inches; from nipple to upper border of tumour, twenty-seven inches; to lower, sixteen inches; the right breast measured an inch less in each direction. These enormous tumours hung pendulous over the abdomen, and entirely prevented her pregnant condition being remarked by the eye, although she was within six weeks of her confinement. In some parts the skin, hitherto natural, seemed distended, ready to burst, and painful. The success of the scarifications on a former occasion, induced her medical attendants to try them again, but it was now found that very little fluid came from the wound, which immediately became gaping, and exhibited a protrusion of the parenchymatous substance of the breast, firm and fat-like, which protruding portion rapidly increased in size, until it resembled a steatomatous tumour as large as a goose egg. The size of the breasts continued to augment daily, and before the period of accouchement, which happened on the 10th May, 1828, they certainly must have together weighed twenty-four pounds. Their heat was above the natural standard, and here and there their surface was traversed by turgid and swollen veins. They were every where elastic, and in no part uneven or rugged from the occurrence of knotty tumours or hard spots. The integuments were more distended towards their inferior and most pendent portion, on account of the gravitation of the fluid to that part.

In consequence of this the inferior parts yielded much more to the finger when pressed, than the superior, and imparted more of the feeling of softness, but nevertheless they did not pit even on strong pressure. The breasts were narrower at their basis than in other parts, and consequently had a pyriform shape; by pressing strongly against each other they had occasioned mutual excoriation and ulceration on their internal surfaces. At the end of her pregnancy another tumour appeared in the right axilla, about the size of the fist. This was at first painful, soon softened, suppurated, and broke; notwithstanding these various sources of irritation, her general health appeared unaffected, and there were no pectoral symptoms of pains whatsoever. A few days after delivery, the breasts began to diminish in size, and in the course of a week the diminution had so far advanced, that the skin covering the tumour, instead of being distended, was wrinkled and loose; for some weeks before and after the birth of her child, the patient was prevented from sitting up in bed, by the pain in her breasts which the change from the horizontal posture occasioned; when it was absolutely necessary for her to sit up or stand, she could only effect it by aid of persons employed to support her breasts with their hands; and when she remained for any length of time sitting, she was obliged to draw her knees upwards, so as to give support to the breasts which hung over and covered the whole abdomen. In a few days after her accouchement she obtained much relief from the bursting of the abscess in her armpit, which discharged a very large quantity of a white, ropy, milk-like, fluid. On the 30th of June, she was able to follow her usual occupations, and although the breasts were still uniformly hard, and so large as to hang far downwards over the abdomen, yet they were amazingly diminished in size, and the integuments covering them hung loosely and in folds. She could then lie comfortably on either side, and suffered no pain; although still emaciated, she was in other respects healthy. On the 7th of September, she applied for assistance on account of the ulceration between the breasts which had never healed, and on account of the non-appearance of the menses since her confinement in May; she appeared pale and cachectic. Our author determined to try the effects of animal charcoal,*

* Animal charcoal has been strongly recommended by Dr. F. A. Weisse, in indurated tumours, scirrhus, &c. &c.

hich was administered in doses of alf a grain, gradually increased to a rain and a half three times a day; in he course of a month the size of the reast had considerably diminished, and he ulcerated parts had assumed a much ealthier appearance, and were healing. 'arious circumstances, however, pre-ented her from attending the dispen-ary, and consequently all remedies ere laid aside. She was again exa-ined on the 17th May, 1830, when he left breast, which was still some-hat the larger of the two, was found measure 21 inches in circumference t the basis, and 9 inches from the ba-is to the nipple. The substance or arenchyma of the breasts is soft, and he integuments are quite flaccid, loose, nd pendant, so as to afford proofs of he former enormous size of the parts hey covered.

The foregoing case was insusceptible f abbreviation, it having been already ompressed into as portable a shape as ossible.

Galen appears to mention excessive nlargement of the breasts. Scaliger riefly describes one; so does Bartho-nus. Palmuthius relates a case. A oman had breasts rather larger than sual before her marriage, but their ize increased greatly during her first regnancy, and each succeeding one, ntil at last they hung down as far as er knees.

A case is related in Welser Augs-urgh Chronicles. A servant maid was o incumbered by hypertrophy of the ammæ, that she could scarcely either tand or walk; in every other respect er health was good. The left breast as successfully amputated by a bar-er, and was found to weigh twelve ounds; the young woman was so re-eved by its removal, that she was able support the burthen of the right reast without any great inconvenience. . lady near Koningsburg had a similar ffection; her breasts were so enor-ious, that one of them alone weighed early thirty pounds, and the patient as obliged to have recourse to sus-ensory bandages tied round the neck enable her to support them. In this dy the removal of a suppression of the menses under which she had long laboured, was effected by judicious treatment, and an immediate diminu-tion of the size of the mammæ was the consequence of the restoration of a healthy state of the menstrual dis-charge. A lady of rank who had pre-viously enjoyed a most uninterrupted state of good health, produced a sup-pression of the menses by incautious exposure to cold during the menstrual period; immediately her breasts became painful, and began to swell, and had so increased in size during the following night, that she could neither get out of bed or move herself. She was twice bled in the foot, and the menses were restored thereby, and the affection of the breasts entirely removed.

Dornsten relates a case. A girl, æt. 20, perfectly healthy, awoke one mor-ning in a fright, and was astonished at seeing both her breasts so enormously enlarged, that their size and weight pre-vented her from changing her position in bed. The lactiferous ducts were hard and distended, but there was no pain or soreness in the swollen parts. The left mamma measured 31 inches, the right 38 inches in circumference. The attack commenced in July, and in October the young woman died. Af-ter death, the left breast, which had continued to grow since July, was cut off; it weighed 64 pounds. It was accurately examined, but presented no-thing unnatural in structure, and ap-peared to be simply hypertrophied. The left breast, which was not removed, must have weighed about 40 pounds. The entire weight of the two breasts was seven stone and a half.

Sauvages mentions a nearly similar case, which occurred at Toulouse. Hey relates the following. A girl, æt. 14, slender, but healthy, was always re-markable for the size of her breasts. The catamenia, which appeared when she was thirteen years old, were sup-pressed by exposure to cold, and were never afterwards restored; her breasts immediately after the suppression be-gan to grow, and increased in size from day to day with such rapidity, that when seen by Hey their weight was in-supportable; amputation of the left

breast was performed, and in a short time afterwards, the catamenia re-appeared, and became regular. The remaining breast now began to diminish in size, and in six months was not more than half as large as formerly.

XIV. ADHESION OF THE PLACENTA.

When the usual means for promoting the expulsion of the placenta have failed, some practitioners have recommended the injection of cold water through the umbilical vein.

This may act in two ways; either by stimulating the uterus, and thus exciting it to regular contractions, or by distending the cellular tissue of the placenta, and with it the constricted portion (we are talking of cases of the hour-glass contraction) of the womb. Before resorting to this expedient, we should try the simpler one, of merely immersing the extremity of the cord into cold water; the impression of the cold is thus transmitted to the walls of the uterus, and may induce them to sudden and healthy contractions.—*Archives Générales.*

XV. GONORRHŒA COMMUNICATED BY SWALLOWING THE DISCHARGE.

Dr. Tazentre, of Paris, lately reported the following case to the Faculty of Medicine. Our readers must judge for themselves of its credibility.—*Ed.*

An old sailor, not more chaste after than before marriage, had contracted a gonorrhœa; and as the rogue suspected his wife of infidelity, but had no direct proof of it, he could think of no other way of finding out the truth but by giving her the clap, and then charging her with having infected him. However, the lady was no fool; for observing that her dear moiety was not looking well, and probably having some other good reasons, she declined her husband's affectionate embraces!

Jack was now rather nonplussed; but remembering that, in the colonies, he had learned the art of clapping and poxing, by mixing the discharges with the food of the victims, he now resolved to make the experiment upon his wife. He had repeated it for eight or ten days, when, being caught in the act of stirring something about in a bason of milk, intended for her breakfast, and threatened that it should be taken to a chemist to be analysed, the scoundrel disclosed his infamous practices.

The woman returned to her father's house, and Dr. T. was consulted. At this time, however, no trace of any running existed; but, in four days afterwards, an "intense blenorrhagie" made its appearance.

The author is aware that many who read the above case, will be inclined to attribute to some other cause than to the vile tricks of the husband the vaginal discharge of this woman, who, it is confessed, was visited by another man. He, indeed, was quite sound, Dr. T. informs us.

Dr. T. remarks, in the way of illustration, that many cats, in the "Hôpital des Veneriens," have shewn the symptoms of syphilis, as ulcerations, exostoses, &c. after having eaten the charpie which had been applied to chancres and open buboes.—*Archives Gener.*

XVI. ON THE DIFFERENT SORTS OF GOITRE.

Dr. Sacchi, the chief surgeon of the hospital at Treviglio, has written a very able memoir on this subject, in the December Number of the Annali Universali, from which we shall make a few extracts.

The first form, or species, is that wherein the gland is simply enlarged in volume, but not changed in structure; it has been called by some the fleshy goitre; Dr. S. prefers the term of hypertrophy of the thyroid gland. It is common in young girls and in women—has a regular, even surface, an uniform resistance, and seldom presents any distinct divisions, or lobes.

It may be often cured by medical treatment. If not dispersed, the gland becomes in time variously altered;—

these alterations may be reduced to two leading forms; in the one, the goitre assumes a scrofulous character; in the other, an encysted, or, as it has been called, a lymphatic character. The scrofulous goitre attains often an immense size, but does not give rise to corresponding inconvenience or danger —it is generally lobulated. Now, in course of time, one or more of these lobes may become soft, and give to the finger the feeling of fluctuation; this constitutes the soft, hydatidic, scrous, or lymphatic goitre of authors; the structure has become vesicular, and the contained fluid is sometimes watery— at other times mucous or albuminous, like the white of an egg. In a few cases, it is more like milk or pus, or different cells may contain different sorts of fluid. It must, however, be well remembered that some goitres, which have a most distinct fluctuation, yet contain no fluid; the structure of the gland has degenerated into a mass like that of the placenta, or of a wet sponge.

This variety of goitre is remarkably smooth, uniform, and elastic to the touch. Some goitres undergo a partial ramollissement; for it is quite a mistake to suppose that they always become harder and harder, the longer they exist. From what has been stated, it may justly be concluded that hypertrophy, scrofulous change, and lymphatic degeneration, should be considered as three progressive stages of the same disease; and it is not unfrequent to find different parts of the gland simultaneously affected with these three diseased conditions.

It has been a subject of dispute, whether the thyroid gland is ever primarily affected with true scirrhus. Scarpa said *not;* and maintained that the disease was always consecutive to cancer or scirrhus of the tongue, œsophagus, parotid, or submaxillary gland, &c.

Dr. Sacchi has, however, narrated a case in confirmation of the opposite opinion: and the dissection of the tumour must preclude any attempt to gainsay its nature. An example of genuine fungus hæmatodes is also detailed.

One of the most curious alterations of the thyroid gland is that which has been called the aneurysmatic goitre; it is formed by an abnormal or excessive development of the thyroid arteries, and of their branches; the former sometimes acquire the size of one of the carotids. On examining the tumour during life, it is found to have strong pulsations at every point; but the pulsations do not resemble those of an aneurism—they convey to the hand rather a sensation of the blood flowing along very rapidly into numerous vessels, and are accompanied with a sound like an obscure buzzing, or tremulous murmur of the whole surface; but this is more distinct and strong over the site of the thyroid trunks. In two cases, given by our author, the tumours had existed for a number of years, and both had been originally brought on by the efforts of the women during their accouchements.

In addition to the preceding forms of goitre, we may state, that the thyroid is occasionally the seat of tuberculous and melanotic depositions, and of hydatidic, atheromatous, cartilaginous, bony, and even of chalky formations. Now all these, as well as the preceding tumours, are included in the general appellation of goitre. Dr. S. adheres to the old opinion that this disease is very frequently, perhaps most commonly, induced by the prolonged use of unwholesome calcareous waters. In proof of this, he alludes to the sanative results of changing the residence of the patients. This, he says, is by far the most important of all remedial means. Iodine is useful chiefly in the hypertrophic and scrofulous forms; less so in the lymphatic; and is quite inefficacious against the small, isolated, and hard goitres. The best mode of using it is by friction, with an ointment of hydriodate of potass, to be continued for one, or for several months.—*Annali Universali.*

XVII. Anencephalous Monstrosity.

A fœtus born between the 5th and 6th

months of pregnancy, presented the following irregularities of development. The arch or vault of the cranium was flattened to a plane surface, on a level with the orbits, and of the occipital hole; from the vicinity of which there projected an immense globular tumour, filled with a liquid cerebral pulp, and with blood; it hung down as low as the lumbar vertebræ. The skin over the nucha and on the back was split, or divided from the occiput to the loins; the trapezii muscles were separated from each other by the prominence of the spinal column. On examining the cranium, it was found that its vault was so depressed, that the point of the finger could only with difficulty be introduced between it and the base. The ossa frontis, parietalia, temporalia, and occipitis, were ossified as much as in a full grown fœtus; they were very small, and joined together by a firm cartilaginous structure, so that there were no fontanelles. The os occipitis was reduced to a large ring of bone; through which the tumour had escaped. The basis cranii did not present any of the normal cavities, or fossæ, for the lodgment of the lobes of the cerebrum and cerebellum. The only vestige of brain was a small organised cerebral pulpy mass, situated in the centre of the base; from this sprung the olfactory and optic nerves; the other cerebral nerves appeared to issue from the base of the tumour; they were soft, easily torn, and of a greyish-red colour. On opening the thorax and abdomen, a complete "bouleversement" of all the organs was discovered, the small intestines were found in the left side of the chest; and the liver and heart in the right side. The left lung was placed crossways from left to right; the right one was shrivelled to very small dimensions, and was pushed up to the top of the thoracic cavity. The heart was much enlarged; the left side turned forwards, and the right side to the vertebræ; the left auricle was wanting, the right one was greatly increased in size; the left ventricle was very small, and without mitral or sigmoid valves; it communicated with the right auricle. The right ventricle much enlarged, was unprovided with any valves, either at the mouth of the auricle, or of the pulmonary artery. The aorta gave off, at its arch, first the right carotid, from which sprung the right subclavian; then the left carotid, the canalis arteriosus, and terminated in the left subclavian; the pulmonary artery having mounted up as high as the first rib, curved round, and ran downwards along the left side of the spine. Immediately after issuing from the ventricle, it gave off large branches to the lungs; it then joined with the canalis arteriosus; and afterwards having supplied in its course the mesenteric, hepatic, splenic, renal, and crural branches, it terminated in the umbilical arteries. The right auricle received all the blood of the body; a small portion of this was discharged into the left ventricle; and the rest, by far the greatest part, into the right ventricle; from which it was sent to the lungs, and into the arteries of the inferior half of the body; the left ventricle received the contents of the pulmonary veins, and propelled these, blended with the blood which had been sent from the right auricle, into the aorta, and thence into the carotids and subclavians.

The particulars regarding the abdominal viscera we must omit. M. Sanson, in his report upon the preceding case, made some interesting observations. He alluded to the deformities of the cranial bones, to the partial destruction of the brain, to the separation of its constituent parts, or ganglions of formation, coinciding with the integrity of the peripheral nerves, and thus furnishing an argument in favour of the respective independance of all these parts, and shewed that these irregularities of structure belong to that kind of monstrosity, which M. St. Hilaire has called "notencephalic."

It is an axiom which, of late years, has been much insisted upon by philosophical and comparative anatomists, that the organism, even in its anomalies, obeys certain immutable laws; and it is said that the imperfections of organization, in one of the higher animals, always correspond with, and constitute the natural condition of these abnormal parts, in some animals lower in

ale. Now, without alluding to rophy of one of the lungs in the fœtus, (a state of things which ated it to the "ophidiens unipul- ") nor to the absence of the left e and the diminished size of the ntricle, the organ being thus in degree brought to the state of a , or one-sided heart. We shall it ourselves by saying that the al- complete want of the diaphragm, ie huddling together of the tho- and abdominal viscera, present striking analogies to the normal ization of reptiles. The analogy more surprising in the circula- pparatus. M. St. Ange has lately that in the crocodile, the head re extremities alone receive pure ed blood; all the rest of the body plied with blood, half arterial, enous. Now, such an arrange- exists in the present case, and is the most curious and instructive ters of its history.— *Transact.*

. Clinical Observations, by . Steinmetz of Pyrmont.

1. *Croup.*

inefficacy of the ordinary treat- by leeches and calomel, induced . to trust almost entirely to the employment of emetics. The formula he has used is three of emetic tartar dissolved in an of water, to be sweetened with A dessert spoonful may be given t, and then every five minutes a oonful, until very free vomiting uced. He has sometimes added grains of sulphate of copper, in which required immediate relief. ausea and occasional retching l be kept up till the danger be

success which Dr. S. has derived his treatment is stated to be very ing.

2. *Excision of the Clavicle.*

an, aged 31, had been afflicted crofulous tumours and abscesses any years. One of these had formed over the right clavicle, and when it broke, the bone was discovered to be extensively carious. The patient's health becoming gradually more and more infirm, and the local malady not improving, it was determined to extirpate the diseased clavicle.

This was easily done by a cautious dissection. Although very little blood was lost, the patient was exceedingly exhausted, and required active stimulants to restore him. The wound was quite closed in seven weeks, and the use of the arm was eventually little impaired. In the place of the removed clavicle, a firm cartilaginous deposit had been formed: it was flattened at its sternal, and more rounded at its acromial extremity; and here a few long nuclei were observed upon dissection, the patient having died of consumption, four or five years after the operation.

3. *Morbus Coxarius—Guinea-worm about the Hip-joint.*

A coachman having injured his hip against the shaft of a carriage, continued to suffer at first stiffness, and then severe pain in the joint for a length of time. In spite of all the means used, several abscesses formed in the neighbourhood; the general health decayed, and the patient was afflicted with severe attacks of tetanic convulsions.

One day, the surgeon, when he was pressing out the matter from one of the abscesses, observed a foreign body, like a dirty grey string or filament in the wound: upon touching it, it drew back, so as almost to be concealed. By cautious pulling, the surgeon coiled out two inches and a half of this worm-like body, and secured it round a probe to prevent its retreat. Six hours afterwards he drew out the worm entirely; it measured three-fourths of an ell, was of a dirty white colour, of the thickness of a small quill, or of an earth-worm, not annulated, but uniform throughout; the tail ended in a blunt point. The mouth and intestinal canal were quite obvious. It died very soon after being extracted. The patient speedily recovered, and ultimately was restored to perfect health.

4. *Monstrosity—Absence of the External Ears.*

In a child a year and a half old, observed by Dr. S., there was a total want of the external ears, except two or three small cuticular elevations, not provided with cartilage, which perhaps may be regarded as imperfect lobuli, although situated higher on the side of the head than the corresponding parts of a normal ear. The sense of hearing did not however seem to be impaired. Was this effected through the Eustachian tube, or in consequence of the external skin acting the part of the membrana tympani?—*Graefe's & Walther's Journal.*

XIX. RHINOPLASTIC OPERATION.

A young man consulted M. Dupuytren, some time ago, respecting an eating ulcer which had already destroyed a considerable portion of the point and septum of the nose. Under mild treatment the sore was healed; but a disgusting deformity remained in consequence of the loss of substance.

M. D. resolved to attempt its restoration; and in this case he cut the flap from the upper lip, which was unusually thick and long. Having accurately marked out the dimensions required, an incision was made through one half of the thickness of the lip, and the flap was then dissected or sliced off, the inner surface or face of the lip being left uninjured. The flap was now "retourné" by twisting its pedicle from right to left, and secured to the raw edges of the nose by hair-lip pins, and the twisted suture. Small plugs of lint introduced beneath served to support it. The wound in the lip was then brought and kept together by the same sort of suture. On the 6th day the pins were removed from the lip, and on the 9th from the nose. The flap had united to the septum and point of the nose.

The new appendage was not however very handsome, for the neck, or pedicle of the flap, where it had been twisted round, formed a disagreeable protuberance, and the patient was anxious to be relieved of this annoyance. The Baron would not consent to do any thing, as he expected that it might become smaller and smaller in course of time. Upwards of a year having elapsed, and the deformity being little changed, it was deemed adviseable to accede to the patient's wishes: the pedicle was divided, and all the irregularities pared carefully away. The cure ultimately was a most satisfactory one—*Journ. Hebdomad.*

III.

Institute of France.

I. ACADEMY OF SCIENCES.

Séances in May.

DIVISION OF THE SYMPHYSIS PUBIS.

M. Baudeloque has lately performed this operation with perfect success, both to mother and child.

CHEMISTRY OF THE SERUM OF THE BLOOD.

M. Boudet has of late been continuing his curious researches on this interesting subject. His method consists in evaporating the serum to dryness, pulverising it, and after washing it with hot water, subjecting it to the action of alcohol. He has thus been enabled to detect the presence of cholesterine; and more recently of another product, which he calls seloriné. It is white and slightly nacreous, has neither acid nor alkaline properties, but is reddened, as cholesterine is, by strong sulphuric acid; when heated, it assumes the appearance of an inodorous oily matter floating on the surface of the fluid. It is readily soluble in sulphuric æther; but very sparingly in boiling alcohol. Besides the seroline, M.

Boudet has discovered a fatty, or greasy matter, like that of the brain, and also a peculiar soap substance formed probably of the margarate, or oleate of soda, in the dried serum.

Medical Galvanism.

M. Palabrat has been engaged for some time past in endeavours to discover the most convenient method of introducing remedial substances into any part of the body, by means of a galvanic current.

That this can be effected is easily shewn by employing such chemical agents as exert a visible and easily obvious reaction upon each other; thus if we lay a compress well wetted with the hydriodate of potass upon one arm, and upon the other a solution of starch, a fine violet colour is immediately manifested upon establishing the circuit; if iodine be used, instead of the hydriodate, it is speedily found deposited upon the starch. It may be said that the substance which is thus invisibly transmitted from one part of the body to another, follows the surface of the skin, and is not conveyed directly through the interjacent textures, which are the moist conductors and firm part of the galvanic arc. M. P. is of a different opinion, and rests it on some experiments, in which he not only well dried the skin of the arms, but covered a part of it with a gum-lac varnish; and yet there was not any interruption to the galvanic phenomena. By proper management, the medicinal substance which we wish to be transmitted, may be caused either to remain in the body of the patient, or to be withdrawn from it. If we desire the former it will be necessary to employ acupuncturation at the same time.

M. P. assures us that he has met with very satisfactory success in the treatment of some cases which had resisted all ordinary remedies; he mentions particularly a case of enormous sarcocele, and one of obstinate quartan fever. In the former, iodine was passed through the tumour; in the latter, quinine was introduced into the system.

The memoir was entrusted to MM. Majendie, Becquerel, and Savart, who are to report upon it.

Treatment of Facial Neuralgia, with Belladonna Poultices.

M. Deleau highly recommends the topical application of the pulp of the root of the belladonna, obtained by boiling, to the part affected with the neuralgic pain. It is well to continue the cataplasm until a certain degree of "strychnomania" is induced.

The author assures us that he has seldom failed, when there was no inflammatory or organic affection of the nerves existing.

We must persevere in the use of the remedy for some time, if the beneficial effects do not speedily appear.

Séances in June.

Lithotrity.

MM. Double, Boyer, and Larrey, read their report on M. Civiale's second memoir on the treatment of calculous patients at the hospital Necker. The cases narrated amount to 51, of whom 43 were subjected to lithotrity; and of these, 27 were cured, 10 died, and 7 remained unrelieved. Of the other 8 patients, who were cut, 5 died and 3 recovered. There were only two women in the list; and in both, the calculi were quickly removed by lithotrity. M. Civiale states, that the early youth of a patient is rather a contra-indication against the operation of breaking the stone in the bladder.

Dislocation of the Humerus backwards.

M. Sedillot, surgeon at the Val de Grace, read a report of a case of luxation of the humerus backwards into the fossa infra spinata, which was reduced a year and 15 days after the accident took place. This dislocation is so rare, that its occurrence has been denied by some. Dessault never saw a case; and Boyer mentions only one.

II. ACADEMY OF MEDICINE.

Séances in April.

TRIPLE URETER.

M. Civiale communicated the particulars of a dissection, in which he found a third ureter. It terminated by an open mouth, in the prostatic portion of the urethra.

POISONING BY THE FUMES OF ARSENIC.

A man, who was a manufacturer of the blue pigment used in painting china, and his servant were engaged in boiling a mixture of nitric acid, of cobalt, and of arsenic. All of a sudden the mattrass burst with an explosion, and the room was filled with the fumes. The servant leaped out at the window, and thus saved himself; his master was less fortunate—he was knocked down, and found himself incapable of rising; he lay on the floor, till the servant returned by the door to drag him out. After eight days' most severe suffering he died; his body had become enormously swollen. This was the case with the servant also, but in a less degree; in the course of forty-eight hours the abdomen was as large as that of a woman at the full period of pregnancy. He was taken into the Hôtel Dieu, and derived much relief from purgatives and baths. On the third day after his admission, he passed a quantity of fetid gas from the bowels, and experienced immediate comfort. The tympanitis was gone, and he left the hospital well.

Séances in May.

APOPLEXY.

M. Bouillaud reported several cases of apoplexy, in all of which the left ventricle of the heart was simultaneously hypertrophied, and the chalky degeneration of some of the cerebral blood-vessels was present.

The frequency of such cases has induced almost all good physicians to regard the coincidence as a causal, and not merely an accidental phenomenon; the view which they take is, that in consequence of the enlarged size and greater energy of the left side of the heart, the blood is propelled with excessive force against the delicate and easy ruptured vessels of the encephalon, at some point of which they yield, and thus occasion the apoplectic attack.

The author alluded to the greater frequency of such attacks in periods of great public distress and agitation; and the experience of most practitioners will, no doubt, confirm the accuracy of his opinions. M. Piorry stated that, judging from the numerous cases of apoplexy which have fallen under his notice, three-fourths of them, at least, have been coincident with cardiac disease.

M. Rochoux was not inclined to adopt the sentiments of the preceding speakers; he thinks that by far the most frequent cause of sanguineous apoplexy, is a ramollissement of some part of the cerebral mass, and that this ramollissement is by no means always, nor, indeed, even in the moiety of cases, accompanied with any morbid state of the coats of the arteries.

M. Bouillaud, in reply, alludes to the frequency of ramollissement without hæmorrhage, and vice versâ.

SOMACETICS IN RELATION TO ORTHOPODY.

It may probably be necessary to interpret these two Grecian words—somacetic, we presume, is derived from "σωμασκεω," corpus exerceo; and orthopody, from "ορθος," recto pede progrediens. The meaning, therefore, is, the employment of certain exercises, or gymnastics, in the treatment of curvatures, and other deformities of the spine, limbs, &c. M. Bricheteau in the name of the commission appointed to report upon a very excellent memoir of M. Pravaz, who has for several years devoted his attention to this subject, expressed their high approval of the different means which he suggested for the cure of these distressing maladies. Much contrariety of advice has been given by medical men on the question, whether the patient, in a case, say of spinal curvature, should be kept entirely quiet and motionless, or whether, on the other hand, some corporeal ex-

ercises may not be allowed. M. Pravaz thinks that this has arisen, in a great measure, from not distinguishing general from partial gymnastics. Each case may, and very generally does, demand a special treatment, and it is, therefore, impossible to lay down precise rules which are applicable to all; the great and paramount object is, to call into active use, and to strengthen, one set of muscles, and to render inactive, another set, which act in a direction contrary to the preceding. Whenever and howsoever we can effect this object, we may be assured that we are following a rational therapeutics. Supposing that the deviation is slight, and the symmetrical disposition of the organs of movement is but little affected, then it is advantageous that all the agents of locomotion be simultaneously but gently exercised; for in this way the body will be best fortified, and the incipient irregularity be most effectually obviated; but, when the deformity is greater, and there is well-marked lateral curvature of the spine, and, consequently, an inclination of the chest to one side, general exercise alone may aggravate rather than better the case; and the reason of this is very apparent; the muscles of the two sides do not act symmetrically and with equal force; on the convex side they are stretched, and on the concave they are relaxed. Some writers have recommended us to trust chiefly to mechanical contrivances, which relieve the weak part of the spinal column from the superincumbent weight—others, again, have decried these as worse than useless; but here, as upon most other occasions, the safety lies in the mean. The profession is much indebted to the late Mr. Shaw, for his judicious and scientific suggestions, and M. Pravaz handsomely acknowledges his obligations to the English author. By following the same path of enquiry, he has succeeded in proving, most satisfactorily, that certain sorts of active exercise are admirably fitted to benefit many cases of deformity.

The indication to be kept in view, is to relieve the spine of the superincumbent weight, while the muscles of the limbs and body are permitted free movements—leaping, wrestling, fencing, and so forth, are highly objectionable; instead of these, clambering along a floating cable, or drawing oneself along two cables, stretched parallel to each other, by hanging to them, and pushing the body on by the effort of the arms and legs, or mounting a rope-ladder backwards, and especially the amusement of swimming, are highly recommended. But, as these exercises cannot be at all seasons pursued, M. Pravaz has contrived a very ingenious carriage, which is pushed up an inclined plane by the patient himself, who, lying on his face, and grasping two lateral stanchions, drags his body forwards, and thus impels the carriage at the same time; it then runs down the plane by its own weight. The muscles of the arms and shoulders are thus powerfully called into action. Another very useful exercise is that of balançoire, or see-saw, recommended by M. Clerc, in his memoir on gymnastics; or that proposed by the author, wherein the patient, lying on an inclined plane, turns the handle of a heavy wheel. Boyer had previously suggested something like this. With regard to the balançoire, M. P. recommends that the patients should stand erect upon the ends, and steady themselves by laying hold of two cords from the roof; one of these cords, viz. that which corresponds to the depressed shoulder, should be a little shorter than the other, so that the effort of suspension of the body, at each descent of the beam, falls more upon the affected than upon the other side.

M. Pravaz, differing from many preceding authors, tells us that, in his experience, the catamenia are generally irregular and deficient in females who are kept long motionless in bed, or on the sofa.

Exstrophy of the Bladder.

M. Velpeau read a report upon a case of congenital vesical exstrophy, and discussed the different theories which have been proposed to explain this deformity. He criticised severely the theory which attributes it to an arrest of development, and deemed that it was

much more rational to suppose that it was the result of a pathological change during embryonic life. M. Breschet advocated the theory of arrested development, and ably maintained that nothing has been more satisfactorily proved than the fact, that the abdomen, and also the intestinal tube, are open cavities in the early stage of fœtal existence.

Séances in June.

INOCULATION OF SYPHILIS.

M. Ricord, as is very generally known, has been lately engaged in a course of experiments to ascertain the effect of inoculating with the matter of primary diseased secretions, as from chancres, buboes, and gonorrhœa; and also with the matter of secondary ulcers, as those on the tonsils, on the skin, and so forth.

The result of these trials confirms the old opinion, that the one set of discharges is contagious, and the other is not.

It is right to observe that the experiments were performed on the individuals themselves, who furnished the matter for inoculation. When the inoculation did succeed, a papula was first formed; this gradually became pustular, and in the course of a few days a scab or crust occupied the summit of each. Upon this falling off, an ulcer, having all the characters of a true chancre, was discovered.

When the virus of a gonorrhœa gave rise to these phenomena, M. Ricord is of opinion that there were cotemporaneous chancres, and that it was, in reality, the discharge from them, and not the running from the uninjured mucous membrane, that was at fault.

OPEN FORAMEN OVALE IN AN ADULT.

A man was recently admitted into the Hospital Beaujon, and died there. He had complained of great weight in the head; round the lips and beneath the eyes there was a cyanotic tinge; the pulse was strong, hard, and regular; the impulse of the heart was moderately powerful; no unusual bruit could be heard, and the temperature of the body was unaffected.

Upon dissection, the foramen ovale was so open, that the point of a finger might be passed through it; and around this large opening, there were several other small ones.

LEGACY OF M. PORTAL.

This distinguished physician left a legacy of 12,000 francs to the Academy, for the purpose of instituting an annual prize of 600 francs to the author of the best memoir on "un Sujet Médical éclairé, par des Données Physiologiques et Pathologiques." The subject for 1834 is—"Quelle a eté l'Influence de l'Anatomie Pathologique sur les Progrés de la Médécine, depuis Morgagni jusqu'à nos jours."

NEW ARTICLE OF FOOD.

A person of the name of Bourlet applied to the Minister of Public Works and Commerce, for permission to introduce a new article of food, which he called "sultana bahmia." The Academy was consulted, and two members were appointed to report. The food is prepared from the young capsules of one of the malvaceæ family; viz. the hibiscus esculentis, so called from being eaten in different parts of Asia and America. Although vastly inferior to the ordinary "plantes potageres;" there is no reason for not acceding to the applicant's petition.

CASE OF EXTRA-UTERINE PREGNANCY, OR OF MONSTROSITY BY INCLUSION.

MM. Villeneuve and Evrat read a report upon a very curious case of the above deviation.

A young unmarried female experienced all the symptoms of obstruction of the liver, when she was about 25 years of age. The enlargement of the abdomen went on gradually increasing for six years. A distinct fluctuation could be felt, and upon introducing a trocar, fifty pints of a limpid, lemon-coloured liquid flowed out. Two years afterwards she was again tapped—fifty five pints were evacuated, and a flock of hair was found to have escaped with the serum. Before her death she was tapped a third time, and more hair

it. On *dissection*, an immense
s found, occupying a large por-
the abdominal cavity; in it
ere two small bundles of hair,
ed in a greasy, fatty substance,
ize of hen's eggs; attached to
these was a fragment of bone,
) or three fœtal teeth. The an-
art of the womb had been wasted
and the os uteri was so small,
probe could with difficulty be
through. All the rest of the
apparatus had been destroyed,
)unded with the cyst. The hy-
s present, and the patient had
having ever had sexual inter-

preceding case was sent to the
y by Dr. Philip, of Sarlat, as
extra-uterine pregnancy; the
s view it as one rather of "mon-
by inclusion," and as analo-
the cases narrated by Baillie,
ysch, and Dupuytren.
apuron stated that one diagnos-
k between these two sets of
, that a placenta exists in the
and is awanting in the latter.

Miscellaneous.

I. On Pellagra.

ears ago, the Austrian govern-
ibmitted certain questions to the
)rs of the University of Pavia,
ng that endemic disease of Italy,
of late has so much attracted
attention; and required of them
s to each individually. Drs.
)rande and Chiappa were selec-
draw up the report. We must
ourselves at present to the sub-
the fifth query—"What are the
eans to eradicate the disease;
at be not possible, to check at
s progress?" The following
le of propositions was drawn up
r:—
o institute medical commissions,
ectorships, in the different de-
nts of the kingdom of Lom-

he inspectors to visit, at stated
, every house in their district, and to report to the comptrollers all cases as they occur. The most proper periods for such visits are the months of April and of September, as the disease generally commences, or at least is much aggravated in Spring, and abates in Autumn.

3. Suitable hospitals, or "maisons de santé," should be appointed to receive the cases of pellagra as they are discovered. This advice is given, not from any dread of infection, but in order that the patients, who are always the poor and wretched, may at once be supplied with plenty of wholesome food, and not exposed to the scorching rage of the Summer sun. It is remarked that the disease seldom affects the lower classes of workmen and artizans in cities and towns, even although their food be scanty and not of the best quality; and this is attributed to their labour being not so fatiguing, and being carried on within doors. Besides, when they are ill, there are the hospitals for them to go to. The poor peasants have none of these conveniences. They toil like beasts of burden, and are worse fed than they are; and, even in sickness, there is no relief provided for them. Thus, when once they become pellagrous, they seldom recover, unless removed to some city hospital.

4. A simply-written and judicious tract, describing the most approved method of counteracting the disease, and of treating its early stages, ought to be freely distributed among the lower orders.

5. Baths should be fitted up at the public expense, and the lower classes induced to bathe regularly when the slightest symptom of pellagra makes its appearance.

6. Marriages among pellagrous persons should be forbidden. Unfortunately for the efficacy of this enactment, the disease, in most cases, does not attack the young, so much as those at and above thirty years of age.

7. It would be well that public or government bakehouses were established, to secure a supply of wholesome and well-fermented bread for the peasants.

8. The cultivation of wheat, barley,

and rye ought to be encouraged, in preference to that of maize or Indian corn (grano turco), which, at the present time, is far too exclusively used by the poor in Italy. The bread made of it is indigestible, ill-fermented, and not nearly so nutritious as that from other grains.

9. The cultivation of the vine ought to be encouraged everywhere.

10. The education of the lower orders in moral, religious, and in general knowledge, ought to be forthwith commenced and zealously pursued.

[Let them but once feel a pride in existence, by breathing the atmosphere of liberty, and then we may hope for a better state of things. The degrading despotism of monks and friars is tenfold worse than that of the bayonet.—EDITOR.]

The general condition, in respect of domestic comforts, might, by wholesome legislative enactments, be materially improved. Agriculture and most manufactures are susceptible of many beneficial changes. The squalid and damp huts of the country people might be converted into clean and pleasant dwellings; their clothing might be made better; and their food more nutritious. Dr. Chiappa strongly and unhesitatingly affirms that the disease is much less dependent upon any local insalubrity of position, than has been generally supposed. No doubt this evil may materially aggravate the calamity, but it does not of itself induce it, and is therefore only of secondary influence. The root of the mischief is to be found in the misery of a scanty and unwholesome vegetable diet, and of hard toil in a burning climate. Let but the landlords be benevolent and humane, and we shall see much less pellagra in future. The work of the peasants in the fields, especially in the spring, when the hot weather sets in, should not be excessive, and not during the sultriness of noon. The morning and evening hours ought to be chosen. If we attend minutely to the symptomatology of the disease, we notice that the skin is first of all affected, then the mucous membranes, especially of the mouth, throat, œsophagus, stomach and intestinal tube; and lastly the whole nervous system. —*Annali Universali.*

II. PETECHIAL FEVER IN ITALY. The symptoms and progress of this fever, which was lately prevalent at Milan, correspond very nearly with what we occasionally observe in the low putrid fever of the crowded and unhealthy parts of London. It is unnecessary, therefore, to dwell upon these; and indeed our chief object in this notice, is to point out the mode of treatment, which, in the practice of Dr. Beccaria, proved so successful, that only six out of a hundred died. We need not remind our readers, that climate and other casualties may have a very important influence on the character of a disease, as well as upon the constitution of patients labouring under it; and that hence it is a maxim of sound therapeutics to keep in memory these circumstances, in estimating the value of any remedial measures.

Dr. B. informs us, that in very few cases were sanguineous depletions required; the patient's strength was insufficient, and symptoms of fatal exhaustion would inevitably have ensued. It was only when pneumonia, or enteritic complications were present, that he ever resorted to general blood-letting. Sometimes the operation was repeated, even to the third time, before the inflammatory state was subdued. As a matter of course we must be guided by existing circumstances as to the amount and frequency of such depletion; still, as a general remark, we again say, that it was very seldom necessary at all. The blood when drawn was usually black and thin; the clot being of a loose texture. Repeated leechings of the temples, cold to the shaved head, and camphorated blisters to the feet were most effectual in counteracting the cerebral symptoms. Frequent washing of the whole body with vinegar and water was of the greatest comfort to the patient: brisk purgatives of jalap and calomel, followed by milder ones, as senna, rhubarb, salts, &c. were quite indispensable; at the same time small doses of the tartrate of antimony, of nitre, or spiritus mindereri, taken repeatedly, induced a very

bouting diaphoresis. Some physicians rusted chiefly to large doses of calomel, rhich they believed to exert a specific ction; but Dr. B. preferred the milder nd safer plan which we have men-ioned. When there were any local ongestive or inflammatory complica-ions, he derived much benefit from ntimonial refrigerating drinks, from astor oil, manna, tamarinds, ipeca-uan, digitalis, and kermes mineral. If, n the contrary, there was great de-ression of the vital powers, with cold-ess of the limbs, and general nervous anguor, camphor mixture, with a few rops of laudanum, and of tincture of ssafœtida, was the most useful remedy; n some such cases the quinine was iven with excellent effects. Whenever ymptoms of putridity appeared, the ecoction of bark, with diluted sulphuric cid, was freely given; and the surface ponged repeatedly with tepid water nd vinegar. It is unnecessary to add hat the chamber of the sick ought to e kept quiet, cool, and airy.—*Annali Universali.*

III. Tonospasmia, a new Nervous Disease.

Dr. Semmola of Naples has recently published an account of a very singular spasmodic disease, which he observed in the hospital of incurables there. It occurred in a young man, of an apparently healthy constitution. As long as he remained quiet, without speaking, there seemed nothing the matter with him; but no sooner had he uttered any sound, than he was forthwith seized with violent general convulsions;—this dependance of the spasms on the voice induced Dr. S. to designate the disease "*tonospasmia.*"

If the patient persisted to speak or to cry out, the spasms continued; and, if he ceased, they ceased also, leaving him perfectly well. The muscles chiefly affected were the extensors of the neck, trunk, and extremities; and the character of the spasmodic movements was, that the legs and arms, after frequent and irregular involuntary convulsions, were suddenly extended; the legs being at the same time brought in contact with and pressed against each other, and the arms forcibly applied to the side. The author compares them to the movements of a frog when submitted to the galvanic action. The malady was only of three days duration when Dr. S. saw the patient; and his health was so good, that he was able to follow his occupation of a porter, provided always that he remained quite taciturn.

Fear seemed to be an occasional exciting cause of the convulsions. The proximate cause Dr. S. supposed to be a "hypersthenia, or irritation of that part of the mesocephalon, from which the extreme roots of the recurrent nerves are given off, in company with the nerves of motion," producing an irresistible association, or sympathy between the muscular movements on which the voice depends, and the general convulsions of the body. His prognosis was therefore favourable; and the treatment which he adopted was depletory; viz. bleeding from the arm, and the application of leeches to the mastoid processes. The patient was very speedily quite cured.—*Annali Universali.*

IV. Case of an Encysted Abscess of the Cerebellum communicating outwardly.

The following very curious case, related by Dr. Scalvanti, of Pisa, is an interesting contribution to the pathology of the brain.

A soldier, aged 23, of a plethoric and healthy constitution, was admitted into the Royal Hospital of Santa Chiara, with the following symptoms, which had suddenly come on; active pyrexia, severe headach, stupor, hard, vibrating pulse, &c. The left parotid was swollen and inflamed. Active depletions speedily restored him; and all that he now complained of was a pain deep-seated in the left ear, accompanied with tinnitus. Blisters and other topical means were tried, but to no purpose; he therefore left the hospital; but soon returned; and now, in addition to the otalgia, there was a swelling of the meatus externus, and he was tormented with head-ache. By cupping, antimonial ointment, &c. he was relieved, and enjoyed a respite for several days; but it

was only a respite, for again came back all his distresses worse than ever; the head-ache was accompanied with violent pulsations and a feeling of burning heat; the patient was feverish and watchful, and the integuments over the squamous bone were puffy and inflamed; leeches were applied to the inside of the nostril, with considerable benefit; still there was the beating pain in the head, which at stated periods became much exacerbated. For about six days he was tolerably easy, but this deceitful calm was soon followed by another attack of suffering; the swelling of the integuments had now increased, and pressing them with the finger caused pain, and left a pit.

These alternations of suffering and relief, the distressing head-ache, which never altogether left the poor patient, and the immunity of the intellectual faculties, led Dr. S. to predict disease of the cerebellum, according to the opinion announced by Lallemand in his Anatomico-pathological Researches. A doubt existed, whether the cerebellum was primarily diseased, or subsequently to a disease of the internal ear. However this might be, the man became worse; in spite of occasional intervals of a few days ease, each attack was more severe and alarming; he became almost quite deaf and stupid, and the external swelling extended along the parietal and occipital bones. A surgeon who was called in consultation differed in opinion from Dr. S. and recommended an incision upon the mastoid process. He considered that the disease was altogether external, and that no suppuration of the cerebellum could have taken place, because there were no symptoms of compression, and the intellect was little impaired. He was not aware of the results of Lallemand's researches. The incision was made, and the bone laid bare, but no appearance of disease was to be seen; the lips of the wound were however kept apart. The result seemed at first very gratifying; the head-ache and deafness were surprisingly relieved; and the external swelling much reduced. His physiognomy however became more stupid, and his speech betrayed a wavering state of mind. It is to be observed, that during the intervals of ease, his appetite was always vigorous; unfortunately for himself he on one occasion had indulged to excess; he was seized with obstinate vomiting; became paralytic, and died on the 29th of June.

Dissection. On cutting down to the bone, the temporal muscle was found to be healthy; the pericranium was somewhat thickened, and a spoonful of pus was found underneath it, between the squamous and zygomatic portions of the os temporis; a hole penetrated right through the bone, just above the meatus auditorius externus, and over the phrenological organ of destructiveness. The membranes of the brain were highly injected;—that portion of the left hemisphere, which occupies the middle and lateral fossa of the basis cranii, was very considerably increased in volume; the cerebral anfractuosities had disappeared, and the cerebral substance was unusually resistant and elastic; the dura mater was perforated opposite to the hole through the bone. Upon opening the lateral ventricles, it was observed that the left one was sensibly diminished in capacity; and right beneath it, a sac, or cavity of the size of a hen's egg was found; the medullary substance had been wasted away, so that the boundaries of the sac were formed by the cortical or grey portion—it terminated outwardly in a funnel-shaped prolongation, which communicated by the previously-mentioned apertures through the dura mater and the bone, with the abscess under the pericranium. The walls of the sac had a fibrous appearance, and altogether resembled an inflamed mucous membrane. The rest of the encephalon was normal. —*Annali Universali.*

V. ATROPHY OF THE CONVOLUTIONS OF THE BRAIN IN THE FŒTUS.

[M. Cruveilhier's 17th Fasciculus.]

Although M. Cruveilhier's work has the disadvantage of being extremely diffuse, and unconnected in the mode of its arrangement, there can be no question that it forms a valuable addition to modern medical literature, and that many affections are described in it,

which were previously altogether unknown, or very little understood. The notice on atrophy of the convolutions of the fœtal brain will probably admit of being placed in this category.

M. Cruveilhier observes that lesions of the convolutions of the cerebrum and cerebellum are much more frequent than is supposed. He is extremely careful in raising the membranes, and in washing the surface of the convolutions.

Atrophy of the convolutions may be general or partial, congenital or subsequent to birth.

When it takes place prior to the complete development of ossification, and the deficiency of brain is not made up by a liquid, the bones sink in proportionately to the atrophy. If, on the other hand, ossification of the bones is completed, or if, the ossification being imperfect, serum replaces the deficiency of cerebrum, the cranium may maintain its natural volume or even exceed it, as in certain cases of congenital hydrocephalus where scarcely any cerebral matter exists. In some cases the cranial bones, instead of sinking inwards, exhibit an extreme thickness.

Atrophy of the convolutions presents itself under several forms.

1mo. It often consists in a simple diminution of volume.

2do. In other cases it is a sort of shrivelling of the convolutions, which present an unequal and granular surface. Sometimes this shrivelling is accompanied with different shades of colour, evidently dependent on a former effusion of blood. In either case, the serum fills the void between the bones of the cranium and surface of the brain. This serum occupies the subarachnoid cellular tissue, and when the atrophy is very circumscribed it raises the arachnoid, like a serous cyst.

These two kinds of atrophy are often observed in old men whose faculties are impaired; and in old women known at the Saltpetrière by the name of *gâteuses*, because they pass under them both their urine and their stools, are bed-ridden, and usually die of bed-sores.

The granular shrivelling of the convolutions very often co-exists with apoplectic atrophy of the same convolutions, and occupies the vicinity of the cellular cicatrices. In this case the surface of the convolutions presents most commonly a yellowish discoloration, attesting the prior existence of a sanguineous collection in the neighbourhood. This shrivelling co-exists also with yellowish points, as small as grains of sand, and with small linear cicatrices cutting the convolutions longitudinally or transversely. These points are so small, the lines so narrow, that they would escape even an attentive examination.

3tio. There is a third order of atrophy of the convolutions which consists in their transformation into a cellular tissue of a brownish colour. This however is the result of an apoplectic attack, and M. Cruveilhier reserves its more complete description until he arrives at the alterations occurring in the sites of apoplectic extravasation.

4to. There is an atrophy of the convolutions with induration of the cellular tissue, which sometimes becomes as firm as cartilage. This induration is the result of inflammation.

5to. Another form of atrophy results from the loss of substance undergone by the convolutions after the red softening. One or other face of the convolutions, often both, are deprived of the grey substance to a greater or less extent. The limits of the loss of substance are marked by an irregular line. The surface of the convolution so denuded is covered by a cellular membrane, of a yellowish colour, and more or less vascular.

6to. A sixth kind of atrophy consists in the transformation of a portion, or of the whole of one hemisphere, or of two hemispheres, into a membrane of extreme tenuity. Often there remains of the brain, only a nucleus represented by the optic thalamus, and the corpus striatum more or less altered. This lesion is most commonly congenital, but M. Cruveilhier is in possession of some cases which appear to shew that a similar atrophy extended to the whole of one hemisphere has been post-natal.

7to. In a seventh kind of atrophy

each convolution is converted into a serous cyst with transparent walls, giving at first the idea of an hydatid cyst.

M. Cruveilhier appends a case, but we do not think it necessary to subjoin it.

VI. On some Diseases of the Muscles.

[M. Cruveilhier, Fasciculus 17.]

M. C. observes that the muscles display all the alterations of tissue which occur in other organs. He enumerates the following:—1mo. Atrophy, one of the forms of which consists in fatty degeneration. We may mention that we saw a remarkable instance of this in a subject brought into the great Windmill Street School for Dissection. All the muscles were converted into a fatty substance, and so wasted that dissection was abandoned. Of the history of the case we know nothing. 2do. Hypertrophy. 3tio. Inflammation and all its consequences. 4to. All organic growths and alterations—the conversion into cellular, fibrous, cartilaginous, or osseous structure, and the formation of cysts of various kinds. 5to. Tubercular and cancerous degenerations, &c. 6to. They may become the seat of spontaneous sanguineous effusions, which have all the character of apoplectic extravasations.

M. Cruveilhier first describes the latter.

Apoplexy of Muscles.

At the head of cases of this sort, M. Cruveilhier places apoplexy of the heart, from which cause he believes that the greater number of ruptures of the organ take their rise.

The muscles of animal life do not escape this lesion. In the latter stages of scurvy, we sometimes find in the thickness of the muscles considerable sanguineous collections. M. C. saw a scorbutic patient, who felt an extreme degree of prostration, and whom he persuaded to make an effort to get out of bed, in the hope that a little exercise might be advantageous. Next morning the posterior part of the leg was found enlarged, tense, hard, and of purplish colour. There had been evidently laceration of the muscle, with extensive sanguineous effusion.

It is not uncommon to find sanguineous extravasations occur in the muscles, independently of scurvy. M. Cruveilhier has observed this five or six times in the great straight muscles of the abdomen, which he thinks particularly liable to the affection. A very remarkable instance of this sort occurred in a female, in the poor-house of Limoges. She was affected with a quartan fever, which had proved extremely obstinate. All at once she was attacked with violent pain in the abdomen, aggravated by the slightest contact. Peritonitis was suspected, and a great number of leeches were applied; but the patient died. On opening her body, the two recti muscles were re-placed by coagula, excepting the thoracic portions; the aponeurotic sheath was distended with the clots, in the middle of which the debris of muscular fibres were discovered. Very lately, M. Cruveilhier observed a similar laceration in an individual who died of delirium tremens. M. Rousset, a distinguished physician of Marseilles, has published the case of a man who died on the twelfth day from the invasion of phlegmonous erysipelas. Twenty-nine sanguineous tumours were found in the substance of the muscles. Some were formed by black and partially-coagulated blood—others by blood resembling lees of wine—others by pus mixed with clots of blood; some were made up of creamy pus, and three small abscesses were found in the substance of the heart.

M. Cruveilhier believes that he has demonstrated that sanguineous collections in the muscles have been produced in many animals by phlebitis, the consequence of irritating injections thrown into their veins. The following is an abstract of some of his experiments. He threw, by means of Anel's syringe, a mixture of ink and water into the femoral vein of a great number of dogs. The injection was made in the direction *from* the heart, the valves having been sufficiently broken down by a probe. In the animals who died in the first few days, all the muscles of the lower extremity were studded with

sanguineous collections formed by clots deposited in the middle of the torn muscular fibres. In the animals who survived, M. C. has found, at the end of one or two months, cicatrices in the muscles, resembling those seen after apoplexy in the brain. The muscles which had been merely injected with blood, and not torn, presented only the ochrey colour, indicative of former sanguineous extravasation.

M. Cruveilhier thinks that these experiments throw light on a formidable disease, which he has witnessed several times, and which consists in a very intense inflammatory fever, attended with ecchymoses, and sanguineous collections in the greater number of organs, but more particularly in the muscular system. M. Guéneau de Mussy shewed him a very remarkable case of this description in the wards of the Hôtel Dieu. A young man, who had not been exposed to any cognizable causes of scurvy, presented large ecchymoses, with considerable tumefaction in the face, giving him the appearance of having been severely bruised. A large sanguineous tumour existed in the site of the great pectoral muscle, another in that of the deltoid, and others in the lower limbs. These tumours, which did not permit the slightest motions of the limb without excessive pain, were soft in the centre, and very hard at the circumference, like bloody tumours of the scalp. M. C. communicated his ideas on the subject to M. Guéneau de Mussy, and the patient was bled, and treated on the antiphlogistic method. The blood was rapidly re-absorbed, and the patient speedily cured.

VII. Case of Diaphragmatic Hernia.

[Cruveilhier, Fas. 17.]

A female patient in the Salpêtrière, æt. 76, rachitic, and subject for several years to severe, but temporary colics, was brought to the Infirmary in the following condition:—Skin cold and blue—pulse absent—constant vomiting—abdomen large, and tender on pressure. The absence of diarrhœa distinguished the case from cholera—of an external tumour from external hernia. In two hours after her admission, the patient died.

Dissection. On opening the thorax, its left side was found to be almost entirely filled by a large tumour, evidently a herniary one, the transparency of the sac allowing the convolutions of the viscera to be distinguished through it. The stomach, large intestine, and some folds of small intestine, contained in the sac, were of natural colour; other portions of small intestine were dark and congested, from strangulation. The source of strangulation was not at the neck of the sac, for the finger passed readily through it. There was no bridle or source of stricture within the sac. The constriction proved to be in the abdomen, where the mesentery was twisted on itself, and so applied to the intestine as to cause its strangulation. The diaphragm presented an opening, corresponding in size to the neck of the sac. The heart was much pushed down to the left side.

As M. Cruveilhier observes, the case is curious, in presenting at once a thoracic hernia and an abdominal stricture. There are two varieties of phrenic hernia—the congenital and the accidental. M. C. considers this an example of the former.

A great number of facts have led M. Cruveilhier to the conclusion, that accidental diaphragmatic hernia is formed in this manner only. A mass of fat is formed between the peritoneum and the diaphragm, behind the xiphoid cartilage; this, gradually increasing, separates the fibres of the diaphragm, and penetrates into the mediastinum; the peritoneum, dragged by the tumour, follows it, and slowly the viscera succeed.

VIII. Amtliche Acusserungen ueber die im Grossherzogthum Sachsen-Weimar gegen die Cholera gerichteten Medicinal-polizeilichen Maassregeln von Dr. *L. F. Froriep*. Octavo, pp. 47. Weimar.

Remarks on the Medico-political State Regulations instituted against the Cholera, in the

GRAND DUCHY OF SAXE-WEIMAR. By Dr. *Froriep*.

We quite agree with the able and active author of these pages, as to the utter inefficacy of regimental cordons and of quarantine prohibitions to stop the march of this new-born pestilence. The invisible monster heeds not Russian bayonets, nor British orders of council; but, chuckling at the contemptible impotence of human precautions, it has made almost every nation of the world pay tribute on its altar. Had the opinions which we expressed, before the cholera reached our shores, been attended to, and had our faithful and well-intentioned advice been followed, instead of the panic-struck and panic-striking manifestoes of a Government board of health, a calm, quiet and intelligent preparation would have been made, and much unnecessary expense, and much fatal alarm, might have been avoided. It is not a little gratifying to us, to find that the sentiments of many of the best physicians on the Continent tally with our own; and, without vanity, we may hope that not a few of them have been converted by the perusal of our pages. A salutary lesson has been taught us by the errors which were so abundantly committed last year, alike by professional and unprofessional people; and we trust that our judgments may not be again blinded, either by wavering fear, by interested selfishness, or by presumptuous quackery. The system of issuing a set of medical prescriptions, and of advising every one to keep a druggist's shop in his house, can never surely be repeated, unless, indeed, the chemists and apothecaries be at the helm of government. We have no hesitation in saying, that manifold and most pernicious evils arose from this foolish admonition. In a country like this, above all, in a city like our metropolis, where doctors are almost as rife as patients, the only precautionary measure required was, urgently to recommend immediate application for professional aid; and, instead of erecting hospitals here and hospitals there, and transporting patients, who were frequently moribund, and not a few of whom died before they reached the doors, had but a moderate sum been set aside to remunerate the private medical attendants on the pauper population at their own houses, however uncomfortable and wretched these may too often be, far more efficient aid would have been afforded, and much needless expense been saved.

For example, in one of the healthiest parishes, no fewer than four district infirmaries were established, and in one, if not in two of these, the number of patients admitted did not exceed four or five.

Our friend Dr. Froriep will thus observe that we are not inclined to go so far in adopting precautionary measures as even he recommends; but it is proper to state that his work was published at the very commencement of last year; and perhaps, therefore, his sentiments may have undergone some change since that date. It gives us much pleasure to express our high esteem for his zealous and indefatigable labours, evinced in the work he has sent us.

IX. SYMPTOME DER ASIATISCHEN CHOLERA ZU BERLIN. Von Dr. *Robert Froriep*. Octavo, pp. 90. Weimer.

We have no intention of entering upon an analysis of this work; not that it is in any way deficient in merit, but solely because the task is quite unnecessary. The cholera was precisely the same disease at Berlin, as it exhibited itself in London; and as almost all our readers, both here and elsewhere, have had abundant opportunities of witnessing the real tableau, it would be a waste of time to present them with a written or a pictorial one. Both are very faithfully given by Dr. Froriep; for, appended to the work are eight copper-plates, some of which are exceedingly well done, and convey a very accurate image of the aspect of a cholera patient, before and after death—of the sunken eye, the icy cold tongue, the rumpled half-sodden skin; also of the evacuations by vomiting and by stool; of the urine at the different periods of the dis-

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and 3, cholera asphyctica.
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f our German brethren appear
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far, when they cut down upon
ıial and axillary arteries, in
draw blood, or merely to in-
appearance of the vessels.
ing the tubes, sometimes no
all escaped; they were quite
r nothing but a little clotted
found; and at other times,
ces of a red and much changed
ed out at first in a continuous
id afterwards in jerks. Dr. F.
enter upon the subject of the
of the disease, which he has
tely described. This we re-
leaves his memoir, otherwise
ingly good one, incomplete—
play of Hamlet, without the
of the prince.

THE POSITION OF THE EMBRYO AND FŒTUS IN THE DIFFERENT CLASSES OF ANIMALS.

s, in a late interesting article
in the memoirs of the Aca-
Medicine, has very ingeniously
at the position of the fœtus,
being always directed towards
ri, is quite independent of any
of gravitation, and he has en-
to prove that it results from
instinct of the little one to
m its prison in the most easy and least dangerous way. He has examined the question, not only with reference to the human subject, but also to some of the other divisions of the mammalia; and the conclusion is surprisingly steady and uniform, that almost always the head of the fœtus is protruded first.

Not satisfied with these data, Mons. Virey has recently extended his enquiries to the other groupes of the animal scale, and has ably demonstrated that the same law seems to operate upon them. In all, or almost all, the direction and position of the fœtus is the same, the head being born first. The frequency of irregularity in this respect is infinitely greater in the human than in any other species, and in civilized than in savage life. Hence it is that in our researches as to the laws of parturition, woman is perhaps the very worst type, or standard of reference, which can be assumed. The extravagancies of fashion and custom, the pernicious effects of dress, the influence of the passions, and many other causes operate upon her frame, but cannot affect that of the lower tribes. Nevertheless, even with her, the rarity of abnormal labour is very wonderful: in an overwhelming majority of cases, the fœtus in utero is placed with its head to the vagina; and as it was known that the head was the heaviest part, the inference was very natural, that therefore it was dependent. Moreover it was found that if a mature infant was suspended by the umbilical cord, the head preponderated downwards; and this was long considered as an argumentum crucis in favour of the explanation given. Even in very modern books we find it stated that, about the seventh month of pregnancy, the head of the fœtus acquires such an increase of size, that the position becomes quite altered; that hitherto it had been uppermost, but that now it falls down, making a complete 'culbute' with its heels up. The objection to this statement was at once obvious; for how can this explanation, by change of relative gravity, be applied in the case of the lower mammiferous animals? In them, although the body of the mo-

ther is nearly horizontal, and the head of the fœtus does not so much preponderate, yet the position of the latter is uniformly the same.

It is perhaps almost unnecessary to expose the fallacy of the experiment to which we have above alluded; viz. that of shewing the influence of the superior weight of the head by suspending a fœtus by the cord. Is not the cord in a multitude of cases coiled round the neck? and is not the placenta sometimes attached to the os uteri, and yet the head is dependent, although the point of suspension by the cord be thus altogether changed? The opinion of M. Dubois is, that the fœtus is endowed with an instinctive and unconscious impulse to assume a particular direction, somewhat in the same manner as the magnetic needle mysteriously points to the poles. We cannot however admit the existence of such a blind, vague, and unintelligible agency;—instinct appears to have little or nothing to do with the phenomenon; and the only rational explanation is to refer it to an ultimate law of the living organism. Farther we cannot go. M. Virey assures us, that if we examine female quadrupeds at different periods of gestation, we shall always find the embryos and fœtuses in the cavity of the horns, as well as in the body of the uterus, so placed, that the head is directed towards the vulva. Thus in a bitch, all the fœtuses descending along the cornua or trumpets of the uterus, have their faces pointed to the vulva; one following the other in a row, like a pack of hounds upon one track. The exceptions to this arrangement are very rare. Let us now examine what is the case with the young of oviparous animals. One might naturally suppose that the spheroidal form of the egg rendered indifferent any particular position of the contained fœtus; but not so. At first the two chalazæ, which retain and fix the vitellus by its two poles, keep also the embryo in a uniform and definite position. The head of the chick is very generally turned towards the big end of the egg, which is here more fragile and more permeable to the air. It is this end which is usually directed to the oviduct, and which is first protruded from the cloaca; and as this holds equally with unimpregnated as with impregnated eggs, the conclusion is very obvious—that the position is by no means dependent upon any influence of the chick, but is rather the result of a simple original anatomical predisposition. M. Dutrochet, in his learned report to the Institute, has these valuable remarks. In birds, the ovum in passing from the ovary into the oviduct, preserves a uniform position; the cicatricula, or embryotic germ, is placed equidistant from the two prolongations of the chalaziferous membrane, which the ovum receives in the oviduct; and always on the lightest, and therefore the most buoyant, and superior side of the vitellus, which is divided into two unequal longitudinal hemispheres, by the insertion of the chalazæ. This uniform and constant position of the ovum at its arrival in the oviduct attests a position equally uniform and constant, while it was yet in the ovary; the one is the consequence of the other.

Now the chick, whose embryotic lineaments exist in the cicatricula, having fixed and determinate connexions with the vitellus, it follows that during its development there will be a tendency to assume and to retain a definite position; and this position will be the same in all eggs. It is towards the big end of the egg that this direction of the chick tends; a direction which is evidently the necessary consequence of the original anatomical position of the yolk, or of the ovum in the ovary. The same reflections are applicable to the oviparous, ophidian and saurian reptiles. M. Virey had lately an opportunity of ascertaining the accuracy of this in a female 'viperia aspis.' Upon opening the oviducts he found eight little vipers, already escaped from the shell; all of them were so placed that the heads were directed towards the vent. So much for birds and reptiles.

In fishes it has been repeatedly ascertained by observation, that the fœtal embryo escapes with its head foremost. And if we examine the direction of the scales on the body of fishes and of rep-

tiles, and of the feathers and hairs on fœtal birds and mammifera, we shall find that they are uniformly directed from the head towards the tail when the animals are born. Had the feet of the young one been first expelled, the feathers and scales might have been brushed forward against their natural direction; and thus the escape from the shell might have been rendered difficult. Let us descend still lower in the scale of animals, and even in insects we shall find that the same law seems to be dominant. Every one knows that the larvæ escape head-foremost from the egg, and that the caterpillar eats through its silky envelope, and the crysalis through its shell. The disposition or arrangement of the covers is sometimes so adapted, that the shells of several chrysalides open by a sort of lid at their anterior extremities. The only exception rests upon the authority of Bonnet; he says that the females of the aphis or plant-louse are born backwards "en reculons;" but that the males escape in the usual direction, that is, with the head first. This statement, although confirmed by the observations of Dutrochet, requires further examination, before we can admit its established accuracy.

Among the vermes, we may take the leech for an example; and in its case we know that the young animal escapes head-foremost from its envelope.

We have thus shewn how uniform and steady that law of parturition is, by which the embryo presents forwards or towards the light, its nervous cephalic pole, or extremity; whether the fœtal envelopes are naturally thinner and more delicate at that part where the head lies, or whether the impulsive effort of growth, or the progressive movements of the fœtus, weaken the tunics of the egg there, we are not prepared to say; certain it is, that they rupture more easily at this point, for the exclusion of the fœtus, than at any other. Even in animals which are fissiparous, or which propagate by buds on the body of the mother (and these buds are to be considered as ova, generated and developed at the surface), the part which corresponds to the head invariably makes its appearance first; and if we pass in succession to the vegetable kingdom, a similar law seems uniformly to prevail. We may, therefore, assume that a universal law of organization, and not a result of gravitation, nor of an instinctive impulse of the fœtus, which arranges its position so that the head escapes first; and we must regard the phenomenon as one of those ultimate laws whose existence we may, and should ever, strive to ascertain, but whose cause or antecedent we know nothing about: such likewise is the law of the ascension of the plumule, and the descent of the radicle of an embryo plant. The fanciful speculation of M. Virey, that as the "nervous or exciting element proceeds from the male in copulation, the ova are so disposed that the anterior and superior region of the body, which is the depository of the nervous apparatus of the embryo, must be first exposed to the impregnating influence of the semen or pollen," need not detain us long to examine. It is much more philosophical to rest satisfied with the fact, than to pen such phantastic nonsense. How do we know that the semen of the male is the "nervous element?"

Conclusions. 1. That the embryo, while situated either in the ovary, or oviduct, or uterus, always presents, in its normal condition, the head foremost.

2. That this position is purely organic and primitive, anterior to the vivification of the embryo.

3. That the position of the germ or plumule in a grain-seed is analogous, and is dependent upon a similar principle.

4. That the agency of gravitation, or of any impelling instinct, cannot be admitted; as we have seen that the position of the unimpregnated ovum is the same as that of the impregnated one.

But although we exclude instinct in the present case, let not our readers suppose that we deny the existence of all instinctive impulse to the fœtus; on the contrary, we regard many of its spontaneous acts as evidences of such

an agency; and one of the most convincing illustrations is, that of the young chick pecking its shell with its beak, in order to make its escape. The seat of instinctive operations we consider to be the ganglionic apparatus of the trisplanchnic nerves, whereas the intellectual functions reside in, or are somehow mysteriously associated with the cerebral mass.—(Vide Histoire des Mœurs, et de l'instinct des animaux, 1821.)—*Revue Medicale.*

XI. POLYPOUS CONCRETIONS IN THE HEART.

No subject of pathological anatomy has given rise to wider dissensions than that of cardiac polypi. The older anatomists not only admitted their occasional occurrence, but repeatedly describe the general appearances and structure of these masses in their writings. Morgagni, Lieutaud, and Sanac were the first to maintain the contrary opinion;—they alleged that the masses which are denominated polypi are only concretions of the coagulable part of the blood, which for a short time before, and also after death, gradually separated into its constituent parts; but they stoutly denied that these polypi are ever formed long antecedent to death, so as to entitle them to a place in the nosological catalogue.

Corvisart, Burns, Testa and Laennec, high authorities in medicine, have however favoured the doctrine of the earlier anatomists, and have endeavoured to point out symptoms which may indicate the presence of such growths;—they all agree in referring their original or primitive development to fibrinous concretions, which must pass through several phases of condition before they constitute legitimate polypi; but the character or nature of these phases is very differently explained by each of these pathologists. The most widely diffused doctrine upon the subject is, that they are to be viewed as products of inflammation of the lining membrane of the heart, ('carditis polyposa,' of Kreysig,) and are therefore analogous to pseudo-membranes. Whether we admit this opinion or not, one thing is now certain beyond doubt, that living organized polypi may exist within the heart. One of the most satisfactory cases is, that lately communicated to the Anatomical Society of Paris by M. Choisy.

Case. A man, aged 47, had suffered during 17 years before his death from almost constant shortness of breath, from cough and violent palpitations;—these symptoms had increased to great severity for five months previous to his admission into the hospital. Although the cough was incessant, no unusual râle was to be heard at any part of the chest; it was uniformly resonant upon percussion; the cardiac region however sounded dull for a much greater extent than natural; and the first sound of the heart was sometimes suddenly interrupted, by a sort of convulsive jerk, or 'saccade;' it seemed, to use Laennec's description, as if a spring behind the heart was suddenly let go, and jerked the organ forwards against the thoracic parietes.* A dry rubbing bruit "de frottement sec et rugueux" was heard between the two cardiac sounds. The pulse was frequent, irregular, and intermittent; and the beating of the heart was felt feeble, and sometimes scarcely appreciable by the hand. The patient became gradually worse; the bruit de frottement became more intense and also so extended that it was to be heard in the pulmonary artery, in the arch of the aorta, and in the subclavians; general œdema supervened, and death soon afterwards.

Dissection. The heart was found hypertrophied to twice its ordinary size. In both auricles there were large sanguineous clots; the one contained in the left auricle enveloped a pyriform body, as large as a partridge's egg; its surface was evidently lined with a continuation of the investing membrane of the auricular cavity, and it was inserted by a fleshy pedicle, four or five lines long, upon the centre of the fossa ovalis—its fundus or base rested upon the auriculo-ventricular orifice, in which it

* The second sound, or that of the dilatation of the heart, was clear and resonant.

seemed to have, as it were, tried to be engaged; it was tuberculated, and unequal or jagged upon the surface; and its consistence was nearly that of a fleshy polypus of the nasal passages. When cut through, it exhibited a texture moderately firm, and of a pale amber colour, except towards the root, where it was more of the colour of the fibres of the heart; the base or fundus of this vegetation was inclosed in a semi-cartilaginous and semi-osseous shell, or covering; and this was cancellated, or divided by partitions into numerous cells, of different dimensions. These cells, the largest of which might scarcely admit a French bean, were filled with a whitish, cerebriform matter, in the centre of which were several firm granulating points.

The left auriculo-ventricular orifice was considerably amplified; its diameter measured at least an inch and a quarter; the mitral valve was wrinkled and tuberculated, and the annulus, or ring of its implantation, was so rough, swollen, and mamillated, where it was opposed to the surface of the polypus, that it resembled not a little the orifice of the anus, when occupied with syphilitic excrescences.

From the preceding detail, M. Choisy is of opinion that he is justified in assimilating this polypous growth with the fleshy productions of the uterus, and with the usual polypi of the nose, antrum, &c.

There are a few analogous cases on record; still it must be confessed that such occurrences are exceedingly rare. The symptomatology of polypus of the heart must necessarily be obscure and unsatisfactory; indeed, we can never expect to discriminate between this and some other morbid affections of this organ. Perhaps, when they are moveable, there may be a variableness and irregularity in the distress or impediment to the circulation, and in the occurrence of the abnormal bruits which arise, such as is not met with in other cases of obstruction.—*Revue Med.*

XII. On the Bruits of the Arteries and Heart.

M. Bouillaud, in the 144th Number of his Journal, has communicated the results of his extensive clinical practice on the above interesting subject, and we doubt not that our readers will be gratified with a condensed view of this able author's researches.

He states that, if we attentively apply the ear over one of the main arteries, as the carotid or femoral, we may perceive a slight dull sound, not unlike to that caused by rubbing one finger rather briskly against another, as in giving a fillip. It is easy to make the sound we hear more distinct, only by pressing the end of the stethoscope a little more firmly upon the part; and now the sound is quite analogous to the bruit de soufflet, heard over the heart when any of its orifices are contracted, or in the hypogastrium, at a certain period of gestation, when the uterus and its contents exercise a compression upon the great arterial trunks in the pelvis. We deem this a much more probable explanation of this latter sound than that given by its discoverer, M. Kergaradec, who attributed it to the passage of the blood into the vessels of the placenta, and hence denominated it the "souffle placentaire."

As to the cause of the arterial bruit, we think that there can be only one opinion, viz. that it proceeds from the rapid friction and shock of the blood upon the surface of the arterial tube; the term, therefore, "bruit de frottement" which we (M. B.) proposed several years ago, would be much more appropriate than the one in use. If, with a syringe, we inject by repeated strokes water into the arteries, and the stethoscope be at the same time applied over a large trunk, we shall hear, at each injection, this "bruit de frottement."

This experiment has been repeatedly performed in the hospital before the students, and they have always easily recognized the sound. M. Pelletan, the professor of medical physics to the Faculty in Paris, states, as the result of his experiments, that when a fluid moves along with a certain velocity, a tube, whose inner surface is quite smooth, no sound or murmur can be heard; (M. Bouillaud does not quite

agree with him here); but that it is immediately appreciable, if the surface presents any roughnesses or inequalities; and, moreover, that a certain degree of vibratory motion is then felt in the tube; the motion also being much more considerable, if there be any obstacle to the free stream within. It is now very generally admitted by the profession, that the theory proposed by Laennec to explain the bruit de soufflet is quite erroneous.

This illustrious author, prefacing his description by the remark, that it must depend upon either a "particular vital condition, a sort of spasm or tension of the artery, or on a particular state of the blood, or on the manner in which it is moved along," at length gives the preference to the first of these hypotheses, and attempts to confirm and illustrate it, by telling us that the bruit of the arteries, and that of muscles in action, are identically the same; he utterly puts out of consideration the agency of any mechanical obstacle from organic disease, either in the heart or arteries. In conformity with this doctrine, M. Laennec states that the only deviation from health which, without almost any exception, is co-existent with the bruit de soufflet of the heart and large arteries, is a greater or less intense nervous agitation, and that the degree of this is always proportionate to the extent of the bruit. He says—

"Lorsque le bruit de soufflet existe à la fois dans l'aorte, dans les carotides, et dans les troncs arteriels des membres, le malade est dans un etat d'angoisse et d'anxiété extremes. Si le cœur, et la plupart des arteres, presentent le meme phenomene, la vie est en peril; mais, cependant, il est bien rare que le malade succombe, quand il n'y a pas en meme temps affection organique du cœur." Without denying that certain constitutions of body seem to favour the development of this bruit, and that it is by no means unfrequent in irritable, nervous, hysterical and cachectic patients, even when there is no distinct disease of the heart and arteries, we cannot for one moment entertain the unmeaning idea, that it depends upon "a particular vital state, or a sort of spasm," of the circulatory apparatus. What! is it necessary to plunge into the mysteries of vitalism, to explain the occurrences of the blowing, sawing, and rasping sounds which accompany any contraction of the cardiac orifices? as for us, we still adhere to the opinions which we published in 1823, that the blood, in being propelled through any contracted orifice [the forcing pump remaining of the healthy dimensions], experiences an unusual friction; and this friction produces the bruit, and also that peculiar vibratory motion which Laennec called "fremissement cataire." Still we admit that the bruit de soufflet may, and very often does, exist in the præcordial region, without any co-existent contraction of the heart's orifices; but in this case, be it remembered, the sound is only occasional—it is never constant. Of late years, I have had very frequent opportunities of observing the bruit in arteries, while it could not be heard in the heart itself; and it is of much importance to distinguish between these two sets of cases.

It must seem strange to hospital physicians to be told that in a space of four years Laennec had met with only three or four examples of induration of the valves of the heart in patients who during life had presented the bruit de soufflet and the fremissement cataire. Within the last nine years I may safely aver that not fewer than thirty cases have occurred in my practice, and the correctness of the diagnosis has been uniformly confirmed by the post-mortem examinations. Indeed no organic disease of the heart may be so easily distinguished as contraction of the orifices; and we need not repeat that the bruit heard in such cases is a physical, much rather than a vital effect, or, as Laennec says, "an anomaly of nervous influx." Before we quit the consideration of this great author's opinions, we must add, that it has never occurred to us, as it has to him and some other observers, to discover upon dissection a 'notable' contraction of one or more orifices of the heart, when no 'bruit de soufflet ou de rape' had been heard during life.

M. Bouillaud then proceeds to criticise the opinions of Dr. Corrigan on the supposed new disease, which he thought that he had discovered, viz. "permanent patency of the aortic orifice from disease of the semilunar valves," and most powerfully shews their insufficiency and errors. We have not time to transfer the criticism to our pages, but would strongly advise Dr. Corrigan to peruse it attentively. Upon this part of the subject M. Bouillaud again reminds his readers that in all the experiments which he has performed on fluids moving along dead, as well as along living tubes, he has uniformly found that by merely compressing a part, so as to diminish the calibre of the vessel there, a bruit, altogether similar to the bruit de soufflet, may be produced. That such a pressure or constriction is not however the only and invariable cause of this bruit, is amply certified by its very frequent occurrence in nervous chlorotic females, who are subject to hysterical affections. Of late years a number of young women have been sent by different practitioners to the hospital, for supposed organic disease of the heart. They were subject to violent palpitations of the heart, shortness of breath, and strong and very forcible pulsation of the carotids.

The precordial region did not present dulness on percussion over a greater extent than usual; there was no auscultatory sign of any organic lesion; no blowing, sawing, or rasping noise; and yet these patients could not take the gentlest exercise without suffering from dreadful palpitations and dyspnœa.

In all these patients a peculiar sound of a remarkable intensity was audible over the carotid arteries; in some cases these arteries not only blew and hissed, but cood and even gave out a musical whistle, as Laennec has observed. Between this whistling note and the common bruit de soufflet there are numerous degrees or shades of sound; a very curious one is that which Bouillaud compares to the sound of the little instrument, called by the French "le diable," when struck. In a young chlorotic female it was so remarkable, that, by regulating the degree of pressure on the artery, a sort of gamut of tones, from the lowest, which was a blowing, to the highest, which was a rumbling or snoring sound, was produced; just like the succession or wave of tones on the little instrument we have alluded to. When the arterial bruit arrives at such a degree as in the above case, it is not intermittent or occasional, but is continued; being stronger however during the diastole of the vessel, and acquiring therefore a leaping or "saccadé" character. Its most common seat is in the carotid and subclavian arteries, especially the former; it is heard loudest over the sternal extremity of the clavicle. In the majority of cases this "bruit" or "ronflement de diable" is audible only upon one side; sometimes it might be heard on both, but less distinctly on one than on the other; hitherto M. B. has met with it, much more frequently upon the left than upon the right side. In some cases it ceases for a time and then returns. If the stethoscope be pressed firmly upon the artery, without however interrupting the circulation, the sound becomes louder, and even of a disagreeably grumbling tone—in other cases the sound is very sensibly diminished. The position of the head affects it not a little; in general it is increased if the head be inclined to the opposite side, and the chin be elevated at the same time. What is very interesting and important to remark is, that the sound is much weakened, or it ceases altogether, if the larynx be drawn aside from the artery in question.

If the patient make any effort while we are listening to this bruit de diable, it instantly ceases; just as the sound of a vibrating cord is suddenly arrested by nipping it tightly. The bruit is interrupted also by any compression of the artery nearer to the heart than the point of the applied stethoscope.

By far the greater number of the patients in whom we heard this curious sound were young, delicate, irritable, and chlorotic females; the nutritive and assimilative functions were imperfectly performed, even although the in-

dividuals might be fat and apparently stout; there might be an excess of fat; but there was certainly a want of good florid blood. The musical sound occurred, generally in lean emaciated subjects. In all the cases no analogous sound was appreciable in the precordial region: perhaps however the sound of the heart's pulsations was more clear than usual.

The treatment of the patients consisted in the exhibition of quinine and of the preparations of iron; the constitutional health was thereby much improved, but the bruit did not altogether cease, except in one case. It is not easy to account for this curious symptom; and perhaps, before attempting any explanation, it will be wiser to examine it under a variety of aspects; to ascertain, among other things, whether it is confined to the carotid and subclavian arteries, or whether it may sometimes be heard in other large trunks. If the former case be true, then it will be necessary to bear in mind the influence of the adjoining windpipe, even although the sound may, as above stated, sometimes exist in one of the carotids only, and be quite awanting in the other.

We should suppose that the state of the arterial tunics is somehow connected with the production of this musical sound; and as there is an exaltation of it at each diastole of the tube, we are led to infer that the heart at each stroke gives a sort of "coup de fouet" to the vessel, through the medium of its contained fluid. It is important to know that an attentive auscultator cannot possibly confound this "arterial ronflement," or murmur, with the blowing or sawing sounds heard in the precordial region, when any of the orifices of the heart are contracted;—if once distinctly heard, it cannot be mistaken for any other. The musical murmur may be still more easily discriminated. As to the simple and intermittent bruit de soufflet of the arteries, it may exist quite independently of any analogous sound of the heart. In conclusion, says M. Bouillaud, the increase of the friction (which in my opinion is the true cause of the bruit de soufflet, properly so called) may arise from three sources, viz.—1. Any exaltation of the motive power of the heart;—thus we know that the sound is audible in many cases of hypertrophy, and of violent palpitations, even although none of the orifices be at all contracted; 2. A contraction of any point of the canal, through which the blood has to pass; and 3. A jagged, irregular, or in any way roughened state of the surface, along which the column of blood flows. We may add that the density of the moving mass of fluid ought probably to be taken into account; but upon this subject, our ignorance forbids us to say more.

Perhaps some of my brethren may be inclined to adopt the opinions lately so ingeniously proposed and defended by M. Rouanet, as to the cause of the two sounds of the heart, which he attributes to the closing or flapping together of the divisions of the auriculo-ventricular and of the semilunar valves. If they do, they will find no difficulty, upon his theory, of applying all the preceding observations to the correct investigation of the abnormal, cardiac, and arterial sounds.—*Journal Hebdom.*

XIII. ULCERS OF THE OS TINCÆ. The following remarks on, and cases of simple ulceration of the os tincæ, are taken from the work of Mad. Boivin and M. Dugés, to the first volume of which we have adverted at some length in a former number. The present subject is considered in the second volume of that able work.

M. Dupuytren has given some account of simple ulceration of the os tincæ. He observes that exploration with the finger only is not sufficient for the discrimination of the affection, which is readily recognized by means of the speculum. On this head we may refer our readers to a notice of a memoir by M. Ricord, in the last number of this Journal. M. Dupuytren proceeds to observe that the os tincæ being disclosed, the surgeon perceives on one or other lip superficial ulceration of a reddish aspect, confined to the mucous membrane. M. Dupuytren recommends cauterizations.

Delpech has observed similar ul- and cured them by cauterization the acid nitrate of mercury, many applied. M. Marjolin observes he size of the ulcers varies. Pains region of the kidneys, a sensa- f weight at the fundament, drag- n the groins, heat in the abdomen nlargement of it as in hysteria, requent flushings of the counte-, with or without leucorrhœa, ccording to the same author, the toms usually attendant on the dis-

M. Dupuytren has added—pain itus.

r authors advert to syphilitic ul- ons on the cervix and os tincæ. n account of these we refer again r notice of M. Ricord's memoir, ugh we may observe that much in cases must depend upon the his- nd attendant circumstances. mmencing cancerous ulcerations ften distinguished with extreme ilty from simple ulcers. Local are sometimes successful in cu- he complaint, and our authors re- ne case in which sarsaparilla was ly effectual. Four cases are de-

se 1. Madame M., æt. 42, of ineous temperament, had borne children, and was recently re- ed to a young man. For some hs she had experienced a feeling elling and weight in the vagina, discharge of a greenish-white r.

examining the parts, M. Dugés l the neck of the uterus low in the a and much swollen, but without ation. On employing the specu- his part of the uterus was found of a deep red colour, the edges ficially ulcerated and of a reddish- n hue. The contact of the edges s instrument with the ulcer had ioned the loss of about a spoonful re blood. The patient lost blood ever she had connexion.

s event is not related.

se 2. Mad. Cher, wife of a car- r, æt. 30, of delicate constitution, nable to suckle her second child on account of milk abscess. In one month after her accouchement the catamenia returned, and flowed regularly for fifteen months. After this the woman complained of pains in the kidneys and in the right groin, and every fifteen days the menses appeared in profusion. A physician prescribed leeches, but without success. About two years after the accouchement our author was consulted.

On examining the parts he found considerable tumefaction of the os tincæ, and extensive, though superficial, ulceration of its anterior lip. He prescribed the frequent application of leeches round the pelvis and to the anus, cupping on the loins, mild aperients, decoction of sarsaparilla, and injections of decoction of poppies with belladonna. Besides these means, the patient was directed to use the warm-bath weekly. In five months the patient was cured; in the following year she became pregnant, and she has had no subsequent relapse.

Case 3. M. G. æt. 30, a cook, had a child at the age of twenty-three. The labour was tedious and difficult, and attended with considerable hæmorrhage. Eight days afterwards severe hæmorrhage again occurred. After this she regained her strength, and for six years the catamenial secretion was regular. The menses then became too abundant and too frequent. In April the patient had a great hæmorrhage, followed by the discharge of a yellowish matter in large quantity. In July, she entered the Maison de Santé. The neck of the uterus was found very low in the vagina, the orifice directed backwards and very open, and its edges thickened and fissured by ulceration. On the anterior lip of the os tincæ was a vegetation of the size of a large cherry. M. Dubois proposed excision of the neck of the uterus, but the patient would not consent, and left the institution. At the end of a month she returned, having experienced a violent hæmorrhage in the interval.

She now fell under the care of M. Dumeril, who ordered her the 1-10th of a grain of the deuto-chloruret of mercury in pills, four times daily, with

emollient and narcotic injections. The mouth was affected on the sixteenth day, when the medicine was suspended. It was resumed and continued for thirty-five days. On the twentieth day the discharge was so profuse that it seemed as if an abscess within the uterus had given way. The patient quitted the hospital before she was cured, and she has not since been seen. On examination before her departure, the excrescence was found to have disappeared, the neck of the uterus was less developed, and the edges of the os tincæ less hard.

Case 4. Mad. de W., æt. 33, a Swiss, experienced, in 1826, a sensation of heat in the parts, and severe lancinating and cutting pains in the bottom of the pelvis. The uterus was rather larger than usual, and slightly painful. The patient, absent from her husband, was subjected to domestic uneasiness, and addicted to masturbation. Under anti-phlogistic treatment, and the discontinuance of her injurious practices, she became much better. In 1829, our author was again called to her. Her health was much affected by the loss of her husband, the catamenia were very irregular, and she laboured under the persuasion that she had cancerous ulceration. On examination, the neck of the uterus was found swollen and exquisitely tender. Leeches to the anus and narcotic injections relieved her. In March, 1830, she was in nearly the same condition as before. The uterus, however, was larger and lower in the pelvis, the anterior border of the os tincæ thicker, softened, excoriated on its surface, and bleeding on the least contact. The unhappy lady had resumed her pernicious practices. After this the patient employed another medical attendant, M. Rullier, and the termination of the case is not detailed.

Case 5. Mad. Al., æt. 30, menstruated at the age of 15, married a few months afterwards, was a mother at 16, and, after that, had three natural labours, and three miscarriages, from the third to the sixth month. Each accouchement was followed by considerable loss of blood. This young lady had obstinate constipation, almost constant pains in the loins and inguinal regions, weight about the anus, sense of lassitude in the thighs, and slight leucorrhœa. Slight exercise fatigued, and coïtus was often very painful to her. Examined in January, 1828, the uterus was found increased in length, and the orifice was extremely painful to the touch. By means of the speculum, the os tincæ was found to be about eighteen lines in diameter, of a deep red colour, denuded in parts of its mucous membrane. The exposed surface was of an intense red, contrasting with the lividity of the rest of the cervix.

The treatment employed consisted of leeches to the vulva, astringent injections, followed by narcotic, slightly purgative lavements, dry cupping on various parts of the pelvis, flannel next the skin, and hip-baths. Besides these means absence from the husband was enjoined.

Mad. Al. became much better, and, being allowed conjugal intercourse again, she soon became enceinte. This was in November, 1828, and, in December, she had the usual symptoms preceding abortion. She was bled and kept in bed. In February the same symptoms were renewed, with violent cough. She was again bled, &c. The lady had a long and difficult labour. She recovered after it, but our author understands that her complaint has returned.

Our authors observe that they could narrate several cases of enlargement and ulceration of the cervix uteri, cured by repose, regimen, and antiphlogistic treatment. In the preceding case they deplore the premature return of the patient to connubial intercourse.

XIV. GRANULAR INFLAMMATION OF THE OS TINCÆ.*

Our authors observe that this affection is rare, very little known, and no where described. It has escaped those who have not employed the speculum.

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* Mad. Boivin and M. Dugés, Traité des Maladies de l'Uterus, &c.

They divide the affection into two varieties, the subacute and the chronic.

In the former there are pain and deep redness of the os tincæ. The elevations discovered by the speculum are sometimes few in number, as large as peas, firm, and whitish; but more frequently numerous, of the size of millet-seed, whitish, and soft. From their interstices blood flows on the contact of the speculum, in examination with the finger, in coïtus, and in defecation. In the chronic variety the granulations are hard and small, whitish, or red and soft, and without redness or softening of the os tincæ itself.

Our authors are tempted to believe that these granulations are not always of the same character, or arising from the same source. Sometimes they have seen them distinctly depend on a dartrous contamination, (vice dartreux,) and on syphilis. Sometimes they coexist when chronic, with induration of the cervix or fibrous tumour of the uterus.

The disease is not generally formidable when unaccompanied by serious complications. The treatment must be adapted to the more obvious indications —emollients, with local depletion in the acute stage—more stimulating measures in the chronic—specific treatment when the cause is syphilitic. In the greater number of cases derivatives, caustics, &c. have been productive of much advantage. The great point is to discriminate accurately the affection and its characters.

We will subjoin five of eight cases related by our authors.

Case 1. Mad. A. Menet, æt. 35, mother of two children, lived luxuriously till the age of twenty-eight, when reverses of fortune obliged her to give lessons in music, which occasioned much exercise of body and of voice. Our authors observe that uterine affections are common among singers. The menstruation was profuse and irregular, there was leucorrhœa, considerable tumefaction of the uterus, surface of the os tincæ livid and studded with vesicular-like granulations, bleeding from the os tincæ during exploration, defecation, and coïtus; emaciation.

Bleeding from the arm to three palettes, cold injections into the vagina, cupping on the sacrum and perinæum several times repeated, the Enghien mineral waters, and some cups of a bitter decoction daily, were the means adopted. In three months the patient was able to resume her occupations. She was directed to wear flannel, and to abstain from long walks.

Case 2. The Countess de C. enjoyed good health till the age of 25, when she met with reverses in fortune. From this time she experienced feelings of weight and pain in the genital organs, with irregular menstruation. In 1824, these symptoms were so distressing, that the patient was obliged to keep her bed. On examination, the os tincæ was found of a reddish brown colour, soft, its anterior lip presenting two small white tumors, each of the size of a pea. This portion of the uterus was very painful, and, on raising the organ with the finger, pain was felt in the left iliac fossa—"a certain index of some morbid adhesion on this side."

Emollient baths—leeches to the pelvis—pills of extract of marigold (souci) and country air, were the means recommended. By the 26th May, the tumours had disappeared, and the patient was better in all respects. She took the baths of Plombieres. Absence from the husband was practised. In 1831, she was quite well. This lady's daughter has a similar affection.

Case 3. The Countess de L. æt. 40, had formerly a herpetic affection of the arm and chest, which was injudiciously repelled. Great domestic unhappiness, and legal separation from her husband, were followed by irritation of the genital organs and venereal desires, which lasted sometimes for seven or eight hours together. Nothing had relieved this distressing affection.

On examination, the inside of the labia and entrance of the vagina were observed to be red and dry. The os tincæ was larger and lower than natu-

ral, and covered with numerous asperities, giving the finger the sensation of grains of sand. Pushing back the organ occasioned pain in the cervix, and in the inguinal regions. The parietes of the uterus were considerably enlarged. Mad. L. would not permit examination with the speculum. We are not informed of the treatment, nor of the result of this case. It tends to shew the local origin of a nymphomaniacal affection.

Case 4. A young woman, æt. 25, died in January, 1824, in consequence of accidental luxation of the two last lumbar vertebræ.

The uterus was of small size, and presented a small fibrous tumour in its anterior wall. Beneath the membrane investing the os tincæ, were soft white granulations, of the size of a pin's head, occupying chiefly the anterior lip. This young woman presented externally all the marks of virginity. Her menstruation had been too copious.

Case 5. Mad. L. æt. 45, had been brutally ill-treated by her husband, and had had several miscarriages. She entered the Maison de Santé, with symptoms that we need not stop to describe, and eleven days after her admission, she died of pneumonia.

Dissection. Besides effusion into the thoracic cavity, there were about three pounds of yellow serous fluid in the abdomen. The liver was studded with tubercles. There was a tumour of the size of a large orange above the left iliac fossa, another in front of the sacro-iliac synchondrosis on the opposite side. These tumors were cysts in the ovaria, which were much disorganized.

There was another cyst on the posterior wall of the uterus. The external surface of the latter organ was covered with small, white, prominent concretions, rounded and hard, like the tissue of the cervix. The cavity of the uterus was occupied by a compact body, irregular, and of whitish-red colour, composed of masses united together by a laminated tissue.

We have introduced this and the preceding article, to lead practitioners to make more particular examinations than they often do, of the condition of the uterus. They may perceive how the symptoms, of which patients usually complain, are common to many local alterations, some of which are perhaps unknown, even by name, to the generality of medical men.

XV. ACADEMY OF SCIENCES.

(Continued.)

Séances of July.

CROUP.

Dr. Maingault read a memoir on the "Urgency of performing Tracheotomy in Croup." The conclusions which he has drawn from his extended researches are the following.

1. That the operation should be performed without delay, when the antiphlogistic and other remedies have failed, or promise little benefit.

2. That the success of the operation is much dependent upon the extent of the inflammation; when it is confined to the larynx, our prognosis may be more favourable.

3. That the opening into the trachea should be made very cautiously, and by repeated strokes with the scalpel, "a plusieurs reprises," because the sudden rushing in of the air through a large aperture may cause asphyxia; and also the ready admission of blood into the windpipe is obviated considerably.

4. That the insufflation of any powder, or the introduction of any liquid, through the wound, into the trachea, ought to be denounced.

MEDICAL ELECTRICITY.

The attention of the Academy has been called, of late, to the great improvements which M. Molt has introduced into this department of therapeutics. MM. Alibert, Dubois, and Desgenettes were appointed to inspect his establishment, and they have made a most favorable report. The following is a

list of the electrical instruments which are proved to be the most useful.

1. The electric brush, which imparts an electric current of great activity, without either spark or shocks.

2. Electric sounds or bougies; for the purpose of being introduced into the urethra and vagina, in paralytic affections of the bladder—in amenorrhœa, &c.

3. A compressing pump, to inject electrified water. The electric fluid is conveyed by means of a current of common or of mineral water; its advantages have been experienced in amenorrhœa.

4. An electrical projector, to communicate the electric fluid under the form of a crackling cool breeze. Cases of amaurosis, and some forms of neuralgia, have been benefited by the use of this instrument.

Embryology.

Dr. Coste, the associate of the late distinguished M. Delpech, has been long engaged in researches respecting the development of the fœtus; the scope and character of these may be drawn from the following brief detail. From numerous minute examinations of the ovaries of mammiferous animals, he has come to the same conclusion as Baer did, viz. that the vesicles of Graaf are, in all respects, similar to the ova of birds. These vesicles are composed of an inorganic external vitelline membrane; and within this there is a transparent liquid, holding small granular particles in suspension.

This liquid is to be viewed as the proper vitellus; for it is at its expense that the cicatricula begins to be developed. On the inner surface of the vitelline membrane, we find a small circular lamina, free and moveable, resting on the vitellus; this lamina is quite analogous to the cicatricula, in the ova of birds. At the time of conception, the Graafian vesicle is detached from the ovary; it then enters, and passes along the fallopian tube, till it reaches the cavity of the womb. The cicatricula, whose earliest development commences while the vesicle is in the tube, gradually extends itself in all directions, till at length it occupies almost the whole inner surface of the vitelline membrane; it then begins to close itself, as a sac, towards that point which is diametrically opposite to the embryonic germ. As the germ increases in size, it absorbs all the contents of the ovum or vesicle; and it now, therefore, begins to be attached to the uterus. The point by which it is attached, is that which we have mentioned above as being opposite to the germ.

Helminthology.

The histories of several cases of the larvæ of the æstrus, or gad-fly, having been found in the human subject, were presented to the Academy, and submitted to the review of M. Geoffroy St. Hilaire. In the first case, observed by M. Roulin at Maraquita, in Colombia, there was a tumour of the size of a large chesnut on the scrotum; the apex was very red, and presented a small opening; this having been enlarged by an incision, gave issue to a whitish pyriform larva, about 10 lines long, and five or six broad at the largest part. The author states that this larva was quite similar to those very frequently found under the skin of the cattle of the country. In a jaguar which he killed on the Cordilleras, he found a great number of living larvæ of the æstrus, under the skin of the flanks. In the case detailed by M. Guérin, the larvæ were contained in the pustules scattered over the body of a negro, who lay sick of variola at the island of Martinique; the length of these larvæ was about 15 millimetres, and the breadth about two. They were of a white colour, indistinctly articulated, and provided with a mouth and anus, easily recognizable with a magnifying glass. M. St. Hilaire very properly says, that it is much to be regretted, that in none of the instances were the larvæ watched till the period of their tranformation; but perhaps we cannot well expect so great a degree of resolution in a patient, as voluntarily to submit to procrastinated pain, which he knows may be easily and effectually got rid of, the extraction of the larvæ being abundantly simple.

XVI. ACADEMY OF MEDICINE.

(Continued.)

Séances in June.

ABNORMAL CAVITY IN THE HEART.

M. Cullerier exhibited the heart of a woman, who had died of phthisis, in which there was a cavity in the interventricular septum.

No symptoms during life had led the physician to anticipate any abnormal state of the organs.

TRAUMATIC TETANUS.

M. Lepelletier communicated the details of an interesting case of fatal tetanus supervening on amputation of the leg; the patient died on the eighth day after the operation. On dissection the sciatic nerve was found vehemently red and injected with blood, from the wound up as far as the pelvis.

M. L. regards this inflammation of the neurilema as the exciting cause and local origin of the tetanus.

Public Séance of the 9th July.

The Academy met in their great hall to announce the prize-subjects for the years 1834 and 1835, and to hear three orations by M.M. Marc, Reveillé-Parise, and Pariset.

The President of the Academy, M. Marc, treated of monomania in its relations with legal medicine and jurisprudence. He forcibly illustrated the existence and characters of this Protean mental malady, and in opposition to many learned lawyers and magistrates, endeavoured to prove that not a few transgressions and crimes are the result of a morbid state of the body, and are not in truth the offspring of a mind capable of deliberation.

The second oration was upon that very just saying of Aristotle, "that most men of genius are affected with melancholy." M. R. ingeniously attempted to shew that the very existence of genius is attributable to an exalted activity and susceptibility of the nervous system, whether this be original or acquired; and that at the same time the very excess of these functions disposes individuals to the disappointment and mental chagrin, which in truth constitutes melancholy.

The concluding oration was delivered by the Secretary, and was well worthy of the noble theme, an eulogium on the late Baron Cuvier.

CHOLERA MORBUS.

M. Kerandren read a letter from M. Guibert, the surgeon of the frigate Melpomene, which has been recently on the Lisbon station. This ship was lying in the Tagus for three months, with a fine healthy crew, exempt from cholera, although the disease was rife on shore. On the 30th June, the pestilence broke out on board most unexpectedly and with great violence. Many of the sailors died in the course of a few hours. The sick were sent to the hospital on shore (an imprudent step) and the ship went to sea on the 3d of July, but the disease travelled as quickly as she did, and for three or four days attacked a number of the crew. In most of the severe cases there were no premonitory symptoms: the poor fellows being as it were stricken at once with death.

DIPTHERITE, OR ANGINA MEMBRANACEA.

M. Gendron regards diptherite and croup as the same disease, only occupying different parts; in the one case the cavity of the mouth and fauces are chiefly affected, in the other, the larynx and trachea. In both the character of the inflammation is the same, and there is the same disposition to the deposit of the false membranes. The first stage of the diptherite demands active depletions; in the second stage, however, when well-formed concretions begin to appear in the throat, our hopes of success must rest chiefly on the application of caustics to the diseased surface. The author prefers for this purpose the nitrate of silver, which may be used either in the solid or fluid form. Some practitioners recommend highly the use of the mineral acids, especially the muriatic.

III.

Clinical Review.

I. Clinical Reports, &c. By John Macfarlane, M.D. Senior Surgeon to the Royal Infirmary, &c.

On Burns and Scalds.

We have drawn attention on several occasions of late to the subject of burns and scalds, because they are accidents that frequently occur, because we think they are often much mismanaged, and because there appears to be an idea, that there is something strange and mysterious in the action of heat on the living body. We need scarcely say that this idea is most absurd, and that cases of burn, when philosophically examined, present nothing mysterious or incomprehensible. In order to arrive at definite and rational methods of treatment in these or in any cases, we must study two things—the effects of the injury on the tissues exposed to it, and on the system; and the effects of remedies. The first is an exact investigation, the second an experimental one.

Unfortunately the investigation has been hitherto almost exclusively of the second description. Men have been blowing hot and cold, using stimulants and sedatives, lead and turpentine, but they have not studied accurately the varieties of lesion produced by heat, and the manner in which the lesion proves fatal. The consequence has been confusion, and instead of arriving at simplicity of reasoning and treatment, the profession has been absorbed in the abominable and unintelligible rigmarole of Dr. Kentish. This very instance is a triumphant answer to the opponents of morbid anatomy.

Let us reverse the order of proceeding hitherto adopted in the study of burns and scalds. Let us look at the fatal cases—let us mark the particular and general lesions—let us compare these lesions with the symptoms. Having done this, having learnt how burns prove fatal, we may rationally consider what means are adapted to the prevention of that result, and we enter on a course of experiments with remedies, knowing what to seek and what to dread. Any other method than this is false, fleeting, and empiric, and all who propose or sanction it, are embarking in a course of imposture or self-delusion.

The volume of clinical reports before us is valuable as a record of imperishable facts. We have turned to it before and shall turn to it again, for the author does not give us conclusions only, but the means which enabled him, and may enable others to form conclusions.—Such works are valuable in every age, for truth is still immutable. Will the theories of John Hunter outlive the facts of Morgagni?

Dr. Macfarlane relates eleven cases of burn, seven of which were fatal. For the reasons we have stated we will glance at the latter first, although the last in our author's category. We need scarcely say that burns may be fatal at three different periods—in the stage of collapse—in that of reaction—and at any subsequent epoch. It becomes of importance to ascertain the actual cause of death in all these stages. And first of that of collapse. It is manifest that this does not differ from the collapse occasioned by any powerful injurious impression or lesion, unless that lesion be attended with loss of blood. This is an important distinction, for collapse occasioned by that which occasions also a great loss of blood, must be very different in many respects from that of burn, where blood is not lost, but merely driven from the surface to the interior. It is probably on this account that consecutive visceral inflammations are, as we shall see, so frequent after burns. Dr. Macfarlane only gives one fatal case of collapse.

Case 1. *Severe Burn—Collapse fatal.*

M. C. æt. 2, admitted Nov. 16th, 1826. Six hours previously her clothes

caught fire, and nearly the entire upper half of the body was scorched. The integuments of the neck, breast, abdomen, back, shoulders, and arms were brownish-coloured, hard, and completely charred. Warm turpentine was applied, but as it produced acute pain, it had to be removed, and the Carron oil was substituted. Brandy and ammonia were freely given, she was immersed in a warm bath, and all the usual methods for exciting reaction were employed, but without effect. The pulse was not to be felt, the skin was cold, the face pale and sharp, the pupils dilated and immoveable. Leeches were applied to the head, but the quantity of blood obtained was trifling; the stupor gradually increased, the respiration became laborious, and the child died comatose, twenty-eight hours after the injury.

On inspection, the vessels of the brain and its membranes were turgid with blood; there was an increased effusion of serum under the arachnoid and into the ventricles; the lungs were loaded with blood, as were the venæ cavæ and right auricle of the heart; but the mucous membrane of the lungs, stomach, and intestines was healthy.

The circumstances to be remarked in this case, with reference to structural alterations, are, the destruction of the integuments, which were killed by the action of the fire, and the congested condition of the lungs and brain. Now the latter is no trivial point. We were lately at a medical society, where a gentleman recommended that in cases of collapse from burn, the patient should be put under the influence of opium, and in point of fact, opium is very generally and very indiscriminately used in the collapse of burn. But we see that they die with congestion in the brain, and opium is known to give a tendency to this condition. Here then morbid anatomy shews, or seems to shew, that the administration of opium in such cases is unsafe. Collapse after burn is a state approaching to coma, and coma contra-indicates opium. The indication for opium is extreme restlessness or pain, but this is a condition opposed to what we may denominate comatose collapse. Dr. Macfarlane's observations on this collapse are judicious.

"When the shock is severe, the function of the brain and nervous system being in a great measure suspended, that derangement of the vascular and respiratory systems is produced, which forms so prominent a feature in this class of injuries. This state is characterized by a shrinking and coldness of the body, pale and contracted features, a rapid and feeble pulse, hurried respiration, and a greater or less degree of insensibility to pain, approaching sometimes to stupor. It may terminate fatally in a few hours, or continue for two or three days before death is produced, or reaction established; the severity and duration of the symptoms depending a good deal on the extent and situation of the injury, the cause by which it is produced, and the age of the patient.

The treatment usually adopted during the stage of prostration, consists in the free and frequent use of diffusible stimulants, with the application of heat to the trunk and extremities of the body;—diluted brandy, with small doses of the carbonate of ammonia and opium, will seldom fail, if carefully administered, in producing the desired reaction. Should we not succeed, however, as will sometimes happen, and there is a risk that the collapse may prove fatal, blood-letting may be adopted. In all such cases there must exist a considerable accumulation of blood in some of the internal organs, to which the imperfect action of the heart, and the feeble and thready pulse, may in part be referred: and should the patient be an adult, and of a robust habit, these symptoms may be beneficially acted upon by venesection, and thus reaction be more speedily established. I have only once had an opportunity of using the lancet during collapse from a severe burn. The usual stimulants had been exhibited for four hours, and failed; but after fourteen ounces of blood were detracted from the arm, a renewal of the stimuli proved more successful, and in less than an hour the heat was restored to the skin, and the pulse became full and bounding."

We should say that the best practical rule is this, to do no more in any way than is absolutely necessary. If we over stimulate, we produce visceral congestion or inflammation; if we deplete, we fear that we may do ultimate mischief, for as collapse occurs chiefly after serious and extensive destruction of parts, there must come a trying reparative process, when all the vigour of the constitution is wanted. We have found warmth applied to the surface a powerful and a harmless adjuvant, and we think that the surgeon should give as little brandy as possible. His object is, not to let the patient die of depression. If *he* produces reaction it is generally overdone. Coax Nature; that is all.

Children are often carried off by convulsions, within a few hours of the injury, or previous to the fifth day. When these appear early, or are rapidly fatal, slight traces of cerebral disorganization can be discovered. There is no difficulty in accounting for this, as convulsion is usually the consequence of slight structural alterations, or of merely functional derangements. Dr. Macfarlane gives a case in which convulsions occurred on the ninth day.

Case 2. *Scald—Convulsions fatal.*

E. S. æt. 3, scalded, Aug. 3d, 1831, on the back, buttocks, lower half of abdomen, and upper part of thighs. Admission four hours afterwards. The cuticle in some parts was raised into large vesications, and from others it was entirely abraded. Carded cotton was applied, and, as reaction had taken place, the bowels were freely opened, with calomel and castor oil, and afterwards small doses of an antimonial diaphoretic were given. The febrile excitement continued urgent, but the head did not appear to be affected until the 9th. At the hour of visit, the child was restless, and screamed occasionally; the eyes were suffused and irritable, the pupils dilated, the face flushed, and the tongue loaded.—*Leeches and cold applications to head.—Small doses of calomel.*—In the evening of the 10th, she was seized with convulsions, which continued with but little interruption during the whole night, and proved fatal on the following morning.

On inspection, the pia mater was unusually vascular, and there was an effusion of serum, with here and there a small patch of lymph between this membrane and the arachnoid. The vessels of the choroid plexus were turgid, and each lateral ventricle contained three drachms of turbid serum. The viscera of the thorax and abdomen were healthy.

Here there was arachnitis, a consequence of extensive scald. On inspection lymph was found between the arachnoid and pia mater. Now leeches were not applied till the 9th, when the pupils were dilated, and it is possible that as that dilatation was a symptom of pressure, and pressure a consequence of inflammation of some little duration, an earlier application of leeches and blisters might have been more successful. However this may be, practitioners may perceive that after burns and scalds they must keep their eyes open, and analyse the symptoms daily, that they may not let that pass, as a mere result of the injury, which is really a symptom of visceral inflammation. We will here introduce a case which occurred to ourselves, and is illustrative of the dangers of indiscriminate stimulation.

Case 3. *Scald—Cephalic Symptoms.*

On the 8th Sept. 1832, the child, æt. 1½, of Mrs. B., Villiers Street, was severely scalded with boiling water on the chest, abdomen, and back. The child was immediately immersed in cold water. A medical gentlemen saw it one hour afterwards, and applied the turpentine liniment. We first saw the child on the 11th. It was feverish, with much irritability, thirst, and dark secretions from the bowels. What the treatment was we do not exactly know, as we merely saw the patient casually. We did not see the child again till the 13th, in the evening. There was then more pyrexia—the motions were very offensive—the aspect pallid—the pupils much contracted—no notice taken of surrounding objects. We found that the local treatment still consisted in

terebinthinate applications—that the child was taking some bitter infusion—and that it had had three glasses of port wine that day.

We recommended abstinence from wine and the discontinuance of the bitter. On the next day we met the medical attendant in consultation. The child was now insensible—pupils firmly contracted—lower part of cornea covered with a film—face pallid—pulse frequent, jerky—one dark motion in the preceding night. We agreed on the following plan of treatment.

Abstinence from wine and all stimulants—confinement to beef-tea and arrow-root—a powder of hyd. c̄ cret., pulv. rhei, and pulv. tragac. comp., twice or thrice daily. Locally, an absorbent powder, with the unguent. zinci c̄ plumbo. Castor oil. Warm baths.

Before the evening three or four motions were procured, and the child was more conscious, and better in all respects. On the 15th, the head symptoms were nearly gone; the child was sensible, sat up, and took its nourishment well. There was now some diarrhœa

Pulv. trag. comp., pulv. cret., comp. c̄ opio, pulv. rhei, stat.

We need not pursue the details, suffice it to say that the bowels were soon regulated, and that on the 17th the child was able to take a little infusion of bark with infusion of rhubarb twice or thrice daily. The child got well with great rapidity.

We think there can be no question that, had the stimulating system been persevered in, this child would speedily have suffered from effusion in or on the brain, or inflammation of the membranes. But we must pass to other visceral affections besides those of the head.

"Besides the tendency to morbid changes in the brain, severe burns frequently prove fatal, by inducing inflammation of the serous or mucous tissues of the thorax or abdomen. Dupuytren, who appears to have investigated the pathology of this class of injuries with considerable attention, enumerates the following sympathetic or secondary lesions, as those which he has most frequently met with; inflammation of the intestinal, gastric, and pulmonary mucous membranes, of the serous membranes of the brain, thorax, and abdomen, and collections of blood and pus in the articulations of the burned extremities. I am not prepared to admit, that the mucous membrane of the digestive organs is more frequently the seat of the inflammation, than the serous membrane of the abdominal cavity, as Dupuytren seems to affirm. On the contrary, I am led to an opposite conclusion, by the dissections I have witnessed. These tend to corroborate the opinions of my friend Dr. Cumin, to whom the profession in this country is indebted for the earliest information on this important topic. He states, in his excellent practical paper on Burns, in the Edinburgh Medical and Surgical Journal for July 1823, that the mucous membranes suffer much less than those of the serous class, and that that cavity is most liable to be affected, the cutaneous surface of which is most extensively injured. I have also observed, that when this internal inflammation commences soon after the injury, and in an acute form, which it frequently does, the morbid changes it produces are usually confined to the serous tissues, but that the mucous membranes suffer more extensively when the disease is chronic, or does not appear till a more advanced period. The first case which I had an opportunity of inspecting confirmed this opinion."

Our experience, so far as it goes, agrees partly with M. Dupuytren's and partly with Dr. Macfarlane's. It tallies with M. Dupuytren's, in making affections of the mucous membrane more common than those of the serous; and with Dr. Macfarlane's, in respect to the periods at which these tissues are attacked. It is not, however, universally true that the mucous membranes only suffer at a late period, for we recently saw a girl die within ten days or a fortnight after a burn, in whom there were extensive ulcerations of the mucous membrane of the stomach and intestines. But to this case we will allude more particularly presently. And now of the cases of inflammation of the serous membranes.

CASE 4. *Extensive Burn—fatal Pleurisy.*

A. M'L., æt. 34, admitted 8th June, 1831, having had his face, back, arms, and front of his chest burned seven hours previously, by an explosion of fire-damp in a coal mine. The cuticle was almost entirely abraded, and the cutis vera and subjacent parts were brownish-coloured, hard, and charred. He complained acutely of pain; he had slight shiverings; his extremities were cold, and his pulse was one hundred and eight, feeble. The excoriated parts were covered with lint, dipped in warm turpentine, and in an hour reaction was fairly established. On the following day, the chloride of lime was substituted for the terebinthine application, and the patient remained tolerably easy till the 12th, when, after a violent rigor, he was seized with acute pain in the left side of the chest, impeding inspiration, and accompanied with a troublesome, dry cough, great restlessness, and thirst; tongue thickly furred; pulse ninety-six, hard. There was a discharge of pus from the margins of the sloughs, which had begun to be detached. Was bled to twenty ounces; twenty-four leeches were applied to the pained part; the turpentine liniment was employed, and he was ordered three grains of calomel and one grain of opium every four hours. Notwithstanding a repetition of the blood-letting, and a continuance of the other antiphlogistic means, with the use of smart purgatives, and nauseating doses of emetic tartar, the symptoms were not relieved in the slightest degree. He was bled, leeched, ordered calomel and opium, and subsequently tartar-emetic, &c. but without avail. The symptoms increased, delirium supervened, and he died on the 16th, eight days after the burn, and four from the commencement of the thoracic symptoms.

On inspection, the left side of the thorax contained a pound of sero-purulent fluid, in which flakes of lymph were observed floating; the lung was considerably compressed, and its investing pleura, as well as that portion of the membrane lining the ribs, was of a deep-red colour, and covered here and there with thick patches of shaggy lymph. The inner surface of the pericardium was inflamed, but there was no effusion into its cavity. The mucous membrane of the lungs, stomach, and intestines, was natural.

CASE 5. *Burn—fatal Inflammation and Gangrene of the Intestines.*

J. G., æt. eight, was admitted on the 25th of January, 1827, two hours after his clothes had caught fire. The integuments covering the abdomen, pubes, and thighs, were abraded, hard, and presented a greyish-brown leathery appearance. The pulse was so rapid and feeble, as not to be counted; the body was cold, and he had rigors. Warm turpentine was applied, and in a few hours reaction was established by hot flasks to the extremities, and the exhibition of the usual stimulants, after which the bowels were opened by castor oil. On the evening of the 27th, there was a return of the coldness, and tendency to rigor; the injured parts were hard and tense; the respiration quick and laborious; the pulse rapid and feeble; the countenance pale and anxious. He was immersed for a few minutes in a warm bath, and ordered small doses of calomel. On the 31st, there was great restlessness, alternating with fits of drowsiness, approaching to coma; the abdomen was slightly tympanitic, but without pain on pressure; the bowels were loose; there was no vomiting. He expired on the evening of the 3d of February.

On inspection, the peritoneum covering the intestines and abdominal parietes was extensively inflamed, and two gangrenous openings were discovered in the duodenum, near its termination. One of these admitted the finger, and from both a free discharge of feces had taken place into the upper part of the cavity of the abdomen, where it was confined by recent adhesions of the intestines. From the lower part of the cavity, near the pelvis, six ounces of a bloody-coloured viscid fluid were removed. There was a considerable quantity of blood effused around the capsule of Glisson, and between the layers of the omentum. The mucous

membrane of the small intestines showed marks of acute inflammation, but only a slight tendency to ulceration was perceptible. The brain was in a state of congestion, and the ventricles contained rather more serum than natural.

Dr. M'Farlane observes that burns, occurring during the period of utero-gestation, are apt to excite premature labour, with or without the presence of abdominal inflammation. In one case which occurred to our author, repeated and profuse uterine hæmorrhage occurred, apparently from detachment of a portion of the placenta. The patient would have sunk, had not artificial delivery been resorted to. Our author details in full another case of burn during pregnancy. The patient, æt. 44, was in the eighth month; the abdomen, pubes, and thighs were severely scalded. On the 4th day she had a rigor, followed by acute pain in the right inguinal region, which speedily became diffused over the abdomen, with alarming symptoms. By bleeding to 58 ozs. calomel and opium, &c. the symptoms were gradually subdued. On the 8th day after the reception of the burn, pains came on, and, after a severe labour of seven hours, she was delivered of a dead child. What is curious, there were several bullæ on the child's abdomen and thorax, although there was no appearance of commencing putrefaction. This patient slowly recovered.

So much for the cases of serous inflammation. Our readers will perceive that, though analogous in some respects with the secondary serous inflammations, after injuries and operations, they are, if we may be allowed to build any thing on the last case, less inevitably fatal. We must, however, wait for more facts before we decide. We proceed to those cases in which the mucous membrane was affected, and we do this the more willingly, as we believe that many false notions prevail on this head.

CASE 6.—*Burn—fatal Ulceration of the Mucous Membrane of the Intestines.*

M. M. æt. 5, admitted Feb. 23d, 1826, with extensive burn of the abdomen and back, from her clothes having caught fire. On May 1st, more than one-half of the ulcerated surface was healed, but she was emaciated, and the health impaired. On June 1st there was only, on the hypogastrium, a sore an inch broad and three inches long. This part ceased to heal, and the granulations became pale-coloured, and gelatinous. No febrile excitement, however, took place; the appetite continued good; the bowels regular; and the tongue clean. On the 19th, after a slight rigor, she complained of pain in the abdomen, midway between the pubes and umbilicus, which was aggravated by pressure; the pulse was quickened, the heat of skin increased, the tongue furred, and the bowels loose and irritable. Leeches and fomentations were applied, and she had a small dose of *oleum ricini*, followed by *calomel* and *creta*, a *warm bath*, &c.

On the 20th she had another rigor, followed by increased febrile disturbance, diffuse pain, and slight tympanitic swelling of the belly; a very rapid and feeble pulse, urgent thirst, vomiting, diarrhœa, and an anxious collapsed countenance. In the course of a single night, the granulations were absorbed from the unhealed sore, and a hollow cavity produced, which was pale-coloured, smooth, glassy, and dry. A considerable portion of the new cicatrix re-ulcerated. She became gradually more and more exhausted, and expired on the evening of the 28th, about four months after the reception of the burn.

On inspection, there was very slight peritoneal inflammation. The mucous membrane of the lower half of the duodenum, and of the jejunum and ileum was very vascular, infiltrated both with blood and serum, and extensively ulcerated.

Dr. M'Farlane remarks, that it is difficult to account for the peritoneal inflammation at so late a period. It seems to us that the peritoneal inflammation was rather dependant on the affection of the mucous membrane, than immediately on the burn. Every one accustomed to the examination of bodies is aware that peritonitis is a very common attendant on ulcers of the mucous membrane in fevers, &c. and the

relations of the tissues are sufficient to account for the fact. The following remarks appear to us to be more pertinent.

"When, from the extent and severity of the burn, a high degree of constitutional irritation has been excited, and so long maintained as to have impaired the health, and produced considerable emaciation, it not unfrequently happens that chronic disease of the alimentary mucous membrane supervenes. This cannot always be attributed to the direct influence of the local affection, but it must sometimes depend on the continued constitutional excitement which the injury has produced. There are many chronic diseases which ultimately lead, in this way, to an inflamed, softened, and ulcerated state of the alimentary mucous tissue; and where the secondary disease is to be referred to the injurious excitement which has been so long maintained."

There can be no question that fever, however induced, will, if long kept up, induce local inflammations and alterations, in organs or tissues remote from that where the origin of the fever exists. Thus, the hectic occasioned by disease of the foot becomes the cause of disease in the lungs—or, if produced by disease in the lungs, it gives rise to ulcerations of the bowels—the symptomatic fever of a suppurating limb, after compound fracture, is the precursor of visceral inflammations or deposites; and so on. It is highly necessary to attend to these facts, even if the principle we have founded on them is disputed, for, practically speaking, we have always reason to dread the existence of such fever, and should endeavour to get rid of it. This can only be done, of course, by removing the cause.

CASE 7.—*Severe Burn—fatal Ulceration of the Intestines.*

M. M'D. æt. 18, admitted Jan. 2d, 1832, having had her clothes set on fire a few hours previously. The back, nates, perinæum, labia, and thighs were vesicated, denuded of cuticle, and in some places charred; the pulse was rapid and indistinct, the thirst urgent, the body cold, and the restlessness great. The parts were put up in cotton, and when the febrile excitement commenced, a purgative was ordered. The pulse continued rapid; she was obliged to lie constantly on her face; and, as her habits were most filthy, and she voided her urine and feces in bed, the sores healed very slowly. From these causes, while the other parts had nearly cicatrized, the right thigh became sloughy, the appetite impaired, and the bowels irritable. Her strength continued to diminish daily; diarrhœa set in, with occasional vomiting; the countenance became Hippocratic, and she expired on the 12th of February.

On inspection, there was found superficial and deep-seated congestion of the brain, with serous effusion under the arachnoid, and into the ventricles. The liver was immensely enlarged and tuberculated; the mucous membrane of the small intestines was injected, tumid, and ecchymosed; the ileo-cœcal valve was in a state of ulceration, as were occasional portions of the colon and rectum.

Dr. M'F. imagines that, by strict attention to the state of the bowels and the skin, he has occasionally succeeded in warding off these attacks of internal inflammation, even when there were premonitory symptoms. We would beg to draw attention to the affection of the mucous membrane of the intestines after burns. Nothing is more common than to hear two remarks, one of which is imperfect—the other, for the most part, erroneous. The remarks to which we allude are these:—First, that diarrhœa is a consequence of burn, and often a good sign; and, secondly, that patients die of exhaustion from burn, meaning, we suppose, that they die because they cannot live.

With respect to the observation on diarrhœa, it is, as we have said, imperfect. The diarrhœa is a sign of that condition of the intestinal mucous membrane, which, if neglected or maltreated, or even managed with the utmost care, is the prelude to the ulcerative action. When that diarrhœa appears, the judicious surgeon will regard it with a jealous eye, and adopt the treatment applicable to chronic muco-enteritis. A

patient is usually constipated soon after the infliction of a burn, and the constipation as usually gives way, in three or four days' to diarrhœa. We have seen a most uncontrollable looseness brought on by the impatience of the surgeon, in throwing in powerful cathartics during the torpid condition of the bowels alluded to. Let him wait till Nature is inclined to work, and let him rather entice her by mild aperients or injections, than force her by drastic purgatives. He will usually have purgation enough before he has done with the case.

We have said that the remark on patients dying of exhaustion is probably erroneous. It is possible, no doubt, that a patient may have such extensive ulceration of the skin as to prove, in itself, a cause of death. But this is not generally the case, and in this, as in other instances, death is produced by visceral disease, usually ulceration of the mucous membrane. The surgeon who believes his patient is dying of exhaustion, will probably order additional support, if not stimulus, as his patient seems more exhausted. The surgeon who is aware that visceral disease is being established, will know that such treatment is certain to be destructive. He will support without stimulating, and will attend to the secondary alteration.

The majority of those whom we have seen die, at any distance of time after the infliction of the burn, have certainly sunk from ulceration of the intestinal mucous membrane. We lately saw a remarkable instance of perforation of the stomach, in consequence of an ulcer which began in its mucous coat. There had been hæmatemesis and voiding of blood by stool before death, which took place rather suddenly; the abdomen was tender on pressure. On examination, there was slight peritonitis, and the perforation we have mentioned. There were various other ulcers in the stomach, and ulcers, also, at the termination of the ileum. The patient died between the second and third week. To this case we alluded in a preceding part of this article. In another case of death after burn, we saw similar ulcerations of the stomach, unattended with perforation.

A case of tetanus after burn is related in the Glasgow Medical Journal, for April of the present year. Tetanus, being a comparatively accidental consequence of any injury, is not possessed of much interest here. We notice the case for the sake of the dissection. The patient was an epileptic, and the part chiefly injured was the right upper extremity. Trismus appeared on the 12th day, and death occurred on the 17th.

On dissection, the anterior roots of the fourth and fifth cervical nerves of the right side were of a bright red colour, compared with those above and below. Two of the middle nerves of the brachial plexus of the right side were of a dirty yellow colour, perfectly distinct from the characteristic whiteness of the phrenic and vagus of the same side. This appearance commenced about an inch above the clavicle, and was traceable downwards into the axilla. The sheaths of these nerves, in the same situation and to the same extent as their discolouration, were sensibly reddened, and numerous distended red vessels were seen in their texture. The median and ulnar nerves were of the same yellow colour, in the greater part of their course through the diseased parts, and their neurilema was injected for two inches below their origins from the brachial plexus.

This article has, so far, been confined to the secondary consequences of burn, to the morbid anatomy, to speak improperly, of the lesion, and to those practical deductions which may obviously be drawn from the dead body. The remainder, and it will be short, applies to the treatment of burns and scalds, independently of visceral complications. We have lately dedicated some pages to this part of the subject, and shall not repeat what we have already said. We refer our readers to our notice of Mr. Earle's two lectures on burns.

The treatment of burns and scalds recommended by Dr. M'Farlane is this —when the cuticle is extensively vesicated, and the surrounding integuments

inflamed, the immediate application of finely-carded cotton, the vesications having been previously punctured. Several layers of the cotton should be applied, and retained in close contact by means of a roller. Two cases are related, illustrative of the good effects of this treatment in superficial burns, in which Dr. M'F. observes that its advantages are most conspicuous. Dr. M'F. however, has found it very effectual in cases where the disorganization is deeper.

A case is detailed, in which the application of cotton, combined with generous diet and wine, effected a cure.

"When the burn has penetrated deeply, and the eschar is still adherent, I prefer applying the turpentine liniment, or a solution of the chloride of lime, to the use of cotton. I seldom have recourse to poultices for the purpose of facilitating the detachment of the charred integuments, these warm and emollient applications, although decidedly useful in accelerating the ulcerative disunion of the sound and gangrenous parts, tend to induce exuberant and spongy granulations, and of course to establish that kind of unhealthy action which forms so serious an obstacle to cicatrization. When the injury is confined to the trunk of the body, the turpentine liniment is employed; but when the extremities are implicated, I have found the chloride of lime solution infinitely preferable. When these applications are had recourse to, several layers of fleece cotton are laid over them, and the dressings are seldom removed until the sloughs have become detached, and a change of the treatment is required."

Dr. M'F. however, has found the cotton injurious in some cases, and these he mentions generally in the following summary.

"In three cases of simple vesicated burns, the application of carded cotton, soon after the injury, was productive of such acute and continued pain, that it had to be removed, and a different remedy employed. In two cases of superficial burns, where the cutis vera was in a state of ash-grey ulceration, and the surrounding integuments presented a bright red colour, the local and constitutional excitement was so great, as to render the discontinuance of this application absolutely necessary. In four cases, during warm weather, the discharge was so profuse, the fetor so intolerable, and the generation of maggots so abundant and annoying, as to require a daily change of the dressing; and besides these inconveniences, the health of the patients became greatly impaired, the appetite diminished, and, in one of the cases, incessant vomiting and diarrhœa were excited. When these untoward circumstances manifest themselves, and especially when the injury is confined to the limbs, I have found the application of a solution of the chloride of lime exceedingly beneficial. In one case, where the front of the chest and abdomen was scalded with boiling water, lint, moistened in a solution of the chloride (containing gr. ij. of the salt to an ounce of water) was applied and kept wet for ten days before it was removed, when nearly two-thirds of the abraded surface were cicatrized. The second dressing was removed four days after, when the cure was complete; acute pleuritis however occurred, and required free bleeding, purging, and the use of emetic tartar in solution. In another case, both lower extremities were scorched by the clothes catching fire; and, of course, the injury extended deeper than in the former one. The same treatment was pursued, although, from the nature and situation of the injury, and the advanced age of the patient (fifty-nine years), the cure was more protracted. The first dressing was removed on the twelfth day, when the greater part of the leathery slough, produced by the destruction of the cellular texture, was found separated, exposing a florid granulating surface. The lotion was re-applied, and continued nearly three weeks longer, before cicatrization was completed.

I consider this a very excellent application to burns; it stimulates moderately, destroys fetor, and, when surrounded with oiled silk, it maintains a degree of heat and moisture, favourable to the separation of sloughs, and to the subsequent cure. In my estimation,

however, no small share of the credit is due to the mode of its employment. Instead of removing the dressings daily, and thus exposing an extensive and inflamed surface to various sources of irritation, they are allowed to remain for several days, care being taken to keep the parts constantly moist, by the assiduous application of the lotion. The injured parts are thus preserved in a state of perfect quiescence, and all external interruptions to the healing process are avoided. Before the lotion is applied, if the vesications are large and tense, it is necessary to evacuate the serum by a number of small punctures, allowing the detached cuticle to remain, which forms a useful covering to the tender surface, and does not interfere with the subsequent cicatrization. Should the burn be extensive, and confined to the trunk of the body, the constant retention of wet dressings has sometimes chilled the patient, and given rise to internal inflammation; in such cases, the cotton is the preferable application, but when the extremities are involved, I have found the solution of the chloride of lime on many occasions eminently successful."

A case of burn of the face, cured by chloride of lime, is detailed. It presents no features of interest. We have now concluded that part of Dr. Macfarlane's book which relates to the subject of burns, and we make no apology for the length of the notice. We are satisfied that practitioners are too generally unacquainted with the true pathology, and, consequently, correct treatment, of these injuries.

II. CLINICAL LECTURES, BY DR. ROOTS.*

We have felt much pleased with many of the observations delivered by this active and talented physician in his clinical lectures, published in our weekly contemporary, the London Medical and Surgical Journal. We have no intention of analyzing these lectures, but we merely notice a few of the more interesting facts related by the lecturer, and made by him the peg on which his remarks are hung.

Fever.

Case. S. Green, æt. 51, was admitted into St. Thomas's Hospital, March 28th, 1833. She had been nurse, and had been ill for a week. She was attacked with shivering, followed by pain of the head and back, with feeling of great weakness, heat of skin, great thirst, and dryness of the mouth; inability to sleep, and great restlessness during the night; her tongue was white and dry. She complained, too, of some cough; her bowels, she said were quite open, but the motions were very dark-coloured.

There being no evidence of particular or prominent lesions, Dr. R. merely prescribed five grains of the hyd. c̄ cret. thrice daily—castor oil—tepid washing—and slops. The alvine secretions soon became natural; medicine was then discontinued, she progressively improved, and was discharged on the 11th April.

Dr. R. observes that he has found mercury useful in fever, in proportion as it is accompanied with inflammation or congestion, or derangement of the secretions. When these indications pass away, the mercury should be discontinued. Of mercurial preparations, he prefers the hyd. c̄ cretâ.

Porrigo.

In a case of *porrigo scutulata*, the following treatment was adopted. The head was shaved every week; and, as the patches were not irritable, tar ointment was applied night and morning, the head being properly washed every morning before the application of the ointment. As her health was very good, she took no medicine during the first sixteen days; but as the bowels then became sluggish, she was ordered gr. x. of the pulv. rhei c̄ hydrargyro, every other morning. The eruption had very much improved, but, at the expiration of four weeks, it appeared

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* Lond. Med. and Surg. Journal. June 29th, 1833.

stationary, indolent, and to want a more stimulating application than the tar-ointment alone. The tar ointment was now used, in combination with the ung. sulph. comp. in the proportion of ℥j. of the former to ʒj. of the latter. This was applied for two days, when much irritation was induced; it was then omitted, and zinc ointment substituted; the irritation subsided, no fresh pustules came out, the redness of the patches diminished, and she was dismissed well in less than two months from her admission.

Dr. R. observes that no one plan of treatment will succeed in all cases of porrigo. We may say the same of most cutaneous complaints, especially the pustular and vesicular. If there is much irritation or inflammation, sedative applications are useful. A vast deal of mischief is daily done by inattention to this circumstance; and many a time and oft have we seen poor wretches tormented, for month after month, by nitric acid, caustic, and other highly irritating substances. We have frequently checked porrigo in its commencement, by careful ablution with warm soap and water, shaving of the head, the application of bread poultices, made with Goulard water, and attention to the state of the digestive organs.

When the inflammation has become indolent, stimulants are necessary. Dr. R. recommends the unguent. picis, diluted with the ung. zinci, in the proportion of one part of the former to four or five of the latter, increasing according to circumstances the quantity of the former. Sometimes it is necessary to combine tar ointment with some of the ung. sulph. comp. or with the ung. hyd. nitratis. If these fail, Dr. R. mentions a strong solution of the nitrate of silver—blisters—pyroligneous acid, added to a bread and water poultice. Children should be separated, and the same combs, &c. not used indiscriminately.

Acute Rheumatism.

Passing over some cases of different kinds, and one of acute rheumatism, of a rather interesting character, we will give Dr. Roots' ideas and experience on the treatment of rheumatism. After commenting on the bark treatment, which he has not seen successful, he goes on to state that he has found moderate bleeding, in the early stage, beneficial, and never had reason to believe that pericarditis was a consequence of it; indeed, his practice has led him to the opposite conclusion. He then proceeds to observe, with respect to colchicum, that it has proved, in his opinion, one of the most useful remedies in the treatment of rheumatism.

"Many, I believe (says Dr. R.), consider that it possesses specific powers over the disease; I do not think so; I have never seen it exercise any control over the disease unless it purged or vomited, and have always seen it prove most useful when it purged pretty actively. You will find, too, many other hydragogue cathartics, as they are termed, equally useful in checking rheumatic inflammation; elaterium, for example, and camboge. More than ten years ago, I treated several cases of acute rheumatism in St. Pancras Infirmary, by bleeding, and a grain of elaterium, given every morning for three or four days, and I found the cases get well quite as quickly as those treated with colchicum, but as the elaterium is less manageable, more likely to distress the stomach and excite vomiting than the colchicum, I certainly prefer the latter; I believe that its good effects in rheumatism are ascribable to its action as a counter-irritant on the mucous membrane of the alimentary canal, exciting, as it were temporarily, disease in a tissue of the body, different from that which is the seat of rheumatic inflammation, and at the same time diminishing the general excitement of the system through the evacuations which it produces, as I believe it to be much more useful when it purges, than when it excites vomiting only; I am, as you well know, in the habit of generally combining it with an alkali, or alkaline earth, as the carbonate of magnesia, which combination tends to diminish its emetic effect, and at the same time increases its purgative action; if this, however, is not sufficient, and it often

is not, then its emetic property may be still further controlled by adding a minim or two of hydrocyanic acid to each dose, for the knowledge of which valuable fact I am indebted to Dr. Elliotson. But useful as colchicum is generally in the treatment of rheumatism, you will not unfrequently meet with cases in which the disease mocks its employment, and this is more especially the case where the inflammation is confined to bursal or ligamentous tissues, here you will find local depletion by leeches, cold application, and mercury, do far more good than colchicum."

In this estimate of colchium we coincide with Dr. Roots. We are in the habit of employing it extensively in many affections, and have ever observed, as Dr. R. has done, that it has done good in proportion as it has purged or vomited. We do not think so much of the combination with magnesia, excepting in cases of gout, as Dr. Roots appears to do. We usually combine it with antimony and with sulphate of magnesia, in saline draughts, and although we often give doses of half a drachm every four hours, we have not yet had reason to repent our boldness. Of course the patient must be watched, and of course, also, the remedy must be suited to the stage of the disease and the powers of the patient. It is only when there is much inflammatory action that we would think of pushing antimony and colchicum.

Hepatic Abscess.

Two cases of this description have been related—one by Dr. Roots in his Clinical Lectures—the other by Dr. Stokes in his. We will give a short notice of each. And first of the case of Dr. Roots.

*Case** 1. G. Scully, æt. 28, a carter, was admitted into St. Thomas's Hospital, Jan. 25, 1833. He complained of acute pain in the situation of the cæcum, increased on pressure, and extending slightly upwards in the course of the ascending portion of the colon—no perceptible hardness—inability to lie upon the right side—tongue white in the centre, red at the point and edges—bowels loosely opened once daily, with some griping—pulse 100, small, rather sharp—emaciation. He had been ill one month. He was thought to be labouring under inflammation of the cæcum, and was treated thus. Twenty-four leeches were ordered to be applied over the painful part; half an ounce of castor oil was directed to be given directly, and five grains of the hydrargyri cum creta every six hours, his diet to be milk and arrow-root. Now, this plan of treatment was continued for about a fortnight, the leeches being repeated nearly every day; the pain diminished, and on the 8th of February he was quite free from pain, with or without pressure.

The mouth was now slightly affected by the mercury, and it was discontinued. He remained free from pain from Feb. 8 to Feb. 16, and was able to get up. He committed an excess in diet, and on the latter day he was confined to bed, with return of pain and pyrexia. He was again ordered leeches and castor oil, but on the 27th, there being still considerable pain, the mercury was resumed. After a week it was again discontinued, in consequence of diarrhœa, with tympanitic abdomen. The diarrhœa was checked by starch injections with laudanum, when mercury was resumed, in combination with opium, leeches being still continued.

Distinct hardness was now felt, extending from the region of the cæcum to the right hypochondrium, and from that to the left. The resonance on percussion was dull. Poultices were applied. The cough now became more frequent, the respiration more hurried, the resonance of the inferior portion of the right side of the chest dull, and the respiratory murmur indistinguishable below the fifth or sixth rib. On the 23d March, circumscribed fluctuation was evident in the right hypochondrium. The mercury, &c. were omitted. On the 26th, Mr. Green punctured the ab-

* Lond. Med. and Surg. Journal, July 27.

scess, and let out four pints and a half of the most horribly offensive greenish-coloured pus. One week after this the patient died.

On dissection the right lobe of the liver was found to be the site of the abscess. This was contained in two large cavities, communicating with each other by a sort of valvular opening. Adhesion of the surface of the liver to the abdominal parietes had taken place, and there the trocar had been introduced. Adhesion had also taken place between a great portion of the convex surface of the liver and the diaphragm, and between the latter muscle and the right lung, the latter being pushed up as high as the fourth rib by the growth and pressure of the abscess. The lung itself was considerably condensed, but the surface of the liver and the diaphragm were so attenuated, that probably they would soon have given way, and the abscess would then have burst into the cavity of the thorax. The cæcum shewed traces of inflammation, and even of ulceration.

Dr. Roots observes that he has not seen above six or seven cases of abscess of the liver. The first was treated by Dr. Haviland, of Cambridge. An opening was made with a trocar, and pus and hydatids discharged. The patient, a female, recovered, and died three or four years afterwards of phthisis, as Dr. Roots believes.

In the preceding case the hepatic abscess had almost emptied itself into the lung. In the following, that event would seem to have taken place.

Case 2.* The patient entered the Meath Hospital, with cough, pain in the right side, and copious expectoration, slightly tinged with blood. On examination a tumour was found in the region of the liver, with corresponding dulness on percussion. On investigation it appeared that the history of the case was this. Six weeks previously the man was attacked with severe pain in the region of the liver. At the end of three weeks, without any previous symptom of disease of the lung, he was seized with a sudden fit of coughing, and expectorated a vast quantity of pus, and it was found that, after the cough and expectoration had lasted for some time, *the hepatic tumour decreased considerably in size.*

It was concluded by Dr. Stokes and all concerned, from these circumstances, that the case was one of hepatic abscess, perforating the diaphragm and opening into the substance of the lung. We extract the following remarks, premising one of Dr. Graves', that the opening of hepatic abscess into the lung is one of the most favourable terminations of the disease, one most frequently followed by recovery. Dr. G. proceeds thus.

"A great number of such cases have been observed, but very few of the patients have undergone examination with the stethoscope; I have related one in the London Cyclopædia of Practical Medicine. In the present case, however, besides the symptoms before mentioned, our opinion was borne out by other considerations. The intercostal spaces were not obliterated; the hepatic tumour, also, was still evident. Now, this might be considered an enlarged or a displaced liver; if displaced it must be in consequence of a vast empyema of the same side: but of the existence of this there was no indication. You remember that, while on the subject of empyema, I remarked, that where we had dulness of sound and absence of the respiratory murmur in the lower and posterior part of the lung from the pressure of an enlarged liver, when we make the patient take a deep inspiration, the respiration becomes audible. This did not occur in the present case. It is probable that, in a case where hepatic abscess bursts into the lungs, the adhesions which are formed prevent the descent of the lung on that side, and to this source we are to attribute the defective nature of the diagnosis. I recollect having seen a case of abscess on the liver with a double opening. The woman had pain and swelling of the right hypochondrium while she was here, and some time af-

* London Med. and Surg. Journal, Aug. 3, 1833.

terwards an evident pointing. She left the hospital about this time, but returned shortly afterwards with a large swelling, like an anthrax, on her side. This was opened by incision, and a vast quantity of pus gushed out. On dressing this one morning, a quantity of air escaped, and on introducing a probe, it seemed to pass in the direction of the diaphragm. We were therefore led to conclude that the hepatic abscess had not only an external opening, but had also passed through the diaphragm and the substance of the lung. On examination, after death, we found that the abscess was not in the substance of the liver, but external to it, and that, from this situation, it had passed through the diaphragm and the substance of the lung. With respect to the case at present before us, all we can do is, to support the man's strength, and produce resolution of the hepatic tumour; in fact, we must treat it as a case of chronic hepatitis."

III. CLINICAL LECTURE OF M. DUPUYTREN ON FISSURE OF THE ANUS.

[Leçons Orales. Tome troisiême.]

Fissure of the anus, though not commonly a dangerous, is an extremely painful affection. The patient usually complains of excessive torture, comparing it to the sensation produced by a red-hot iron introduced into the rectum. The expulsion of the fæces is productive of so much suffering, that he will even abstain from food to avoid it.

Fissure of the anus consists in a long superficial ulceration, developed near the margin of the anus, in the radiated folds of the mucous membrane. On separating the sides of the anus, and making the patient force down, a narrow chink is perceived; its surface red, its edges tumid and callous. The introduction of the finger is often necessary to ascertain the extent to which it passes. It is situated more frequently on the lateral or posterior, than on the anterior face of the anus, and seldom attacks its whole circumference.

The severity of the affection depends on the spasmodic contraction of the sphincter, which occurs on the contact of the smallest foreign body.

The causes of the complaint are numerous. Constipation—the passage of hardened fæces, distending the gut and lacerating the mucous membrane—the clumsy exhibition of lavements, especially when metallic pipes are employed—hæmorrhoidal complaints—the venereal virus.

The inefficacy of local applications has led to the employment of two measures, and of them almost alone—division of the sphincter, and cauterization with the nitrate of silver. Both are so painful, though generally successful, that a less severe method is a desideratum. M. Dupuytren has employed one, which, although not constantly effectual, is sufficiently fortunate to make it worthy of trial, prior to resorting to an operation.

Spasmodic contraction of the sphincter is the essence of the malady; the ulceration is only a secondary phenomenon. The object of M. Dupuytren's treatment is to moderate this spasm, which he does, by the introduction within the anus of the extract of belladonna. The composition of the ointment he employs is as follows:—

℞. Axungiæ..... ps. vi.
Extracti belladonnæ.
Plumb. acet..... āā pm. j.
M.

A tent, of a moderate size, is smeared with this, and passed into the rectum. The size of the tent is gradually increased. The constant employment of the ointment for some days frequently occasions complete relief.

Three cases are related.

Case 1. A young woman was admitted into the Hôtel Dieu. She had been confined four months previously, and had experienced, for some weeks, severe pains in the anus, aggravated each time she went to stool, especially if the fæces were bulky and hard. At the commencement of the complaint, the paroxysms of pain had only lasted for a few minutes, but they became more and more prolonged, and at the period of her admission would continue for several hours.

On examining the anus and drawing out the lower extremity of the gut, a very superficial fissure was discovered. The contraction of the sphincter was such that the little finger could with difficulty be introduced, and it occasioned much suffering. The ointment above stated was smeared on a tent of lint and passed into the gut several times daily. In fifteen days the patient was completely cured.

Ulcerated fissures are met with in three situations, below the sphincter, above it, and within its embrace.

Those below the sphincter occupy only the cutaneous texture, and do not involve the mucous; they occasion more or less pruritus, but produce no pain in defæcation, nor contraction of the sphincter; they are, therefore, not very painful. Most commonly they are produced by the venereal virus.* Those seated above the sphincter affect the mucous membrane, and require the speculum to disclose them. On passing the finger into the gut, there is felt in the situation of the fissures a hard knotted cord, pressure on which occasioned acute pain. They occasion tenesmus on going to stool, relieved after its excretion. The fæces are smeared with puriform mucus, and with blood on the side of the fissures. They are commonly due to the ulceration of internal hæmorrhoids, occasioned by the passage of hardened fæcal matters. Those fissures situated within the sphincter are the most severe affection of the whole, and are accompanied with the spasmodic contraction of the sphincter.

Fissures of the first and second description are usually cured without an operation, by the application of ointments, injections, &c. But in the last mentioned kind of fissure the most speedy and most effectual treatment consists in the operation first recommended by M. Boyer.

Case 2. A man, 28 or 30 years of age, had experienced for more than four months pains in the fundament aggravated by defæcation. Latterly his suffering had become almost insupportable; it was worse after the excretion of the stool, and lasted for four or five hours. He had employed without benefit a variety of treatment, before he was received into the Hôtel Dieu.

There were a small excrescence around the anus, spasmodic contraction of the sphincter, and a fissure on the left side. The excrescence was removed by scissors, and the ulcer incised, after which lint, smeared with ointment, was introduced into the rectum, and kept between the lips of the incision.

M. Dupuytren remarked on this case, that the division of the ulcer itself is preferable to an incision made at a little distance from it. But when the ulcer is on the anterior wall of the gut, towards the urethra of the man or the vagina of the woman, the incision should not be through it.

In old cases the local malady may be attended with severe constitutional disturbance.

Case 3. Angelica Delahaye, æt. 24, of good constitution, and regular, had had several children. She was admitted into the Hôtel Dieu with several fissures of the anus, and with excrescences. The anus was contracted. She rarely went to stool, and when she did so, she had dreadful suffering, prolonged for several hours after the evacuation.—Most commonly the fæces were mixed with a great quantity of blood and mucus. The patient's health was impaired—the surface of the body was pallid and puffy, and she frequently had fever. The disease had existed for several years, was attributable to no known cause, had been attended with little inconvenience at first, and had increased by slow degrees.

* Those depending on the venereal virus, usually extending from the perinæum to the verge of the anus, and frequently attended with excrescences of cutis, which indeed are their seat, are generally curable without difficulty by the application of black-wash in the first instance, followed after a day or two by the oxymuriate lotion, in the proportion of half a grain to the ounce of water.—*Eds.*

After preparatory treatment for a few days, M. Dupuytren excised the excrescence and divided the fissures with a probe-pointed bistoury; several incisions were necessary. A tent of lint, of the size of the finger, was introduced into the anus to prevent the sides of the incisions from uniting.

On the same day the patient had a copious stool, accompanied by considerable loss of blood, but unattended with the usual severity of pain. A new tent was instantly replaced in the rectum. The dressing was re-applied every day and every time the patient had a stool. In twenty-two days after the operation she left the hospital cured.

The foregoing clinical lecture is interesting in connexion with the notice of Mr. Mayo's work, at the commencement of this number.

IV. DR. LATHAM'S CLINICAL REMARKS ON THE DURATION OF FEVERS.

[Bartholomew's Hospital.]

ALL the good old notions in medicine are fast disappearing before the modern rage for precise induction and morbid anatomy. The doctrine of critical days in fevers has been for many years consigned to the tomb. But the belief in specific periods of duration has survived, and old practitioners of the present time yet talk of fevers of twenty-one and of fourteen days, as if their existence were beyond possibility of doubt. The able and the intelligent smile at the fancy, and scarcely consider it necessary to deny, what they do not feel seriously called on to believe. Some tables, constructed by the active observation of Dr. Latham, will serve to shew how futile is the popular creed in this particular instance.

It has been remarked by a keen observer of human nature, that a dogma, intended to exercise a wide and a permanent influence on mankind, must not appeal too clearly to the understanding. What all can comprehend and test by their common experience, implies no peculiar faith nor extraordinary merit in the believer.* We suppose that this principle will sufficiently account for the hold that such doctrines as that of critical days, have retained on the minds of physicians, from the time of Hippocrates to this. The few sober statements of Dr. Latham will complete the discomfiture of this ridiculous assumption.

Dr. Latham justly remarks that it is not always easy to say when a fever ends, or on what precise day it begins. The period of accession is, however, more commonly distinct than that of decline. A decisive phenomenon, or train of phenomena, as rigor, or sickness, or head-ache, may give precision to the former, whilst the latter has no such distinctive mark, and illness gradually merges in convalescence. This objection will appear so obvious and so striking to those of any experience, that we need not dwell upon it further. We must be content, in the generality of cases, to note that about such a time the patient began to get well, and it is on such data for calculating the termination of the malady, that the table we shall now introduce is founded.

Of 309 cases of fever, there were twelve of which the duration could not be satisfactorily determined. The remaining 297 terminated on the days expressed in the table.

Days of the Fever.	Number of Cases ending on each day.	Days of the Fever..	Number of Cases ending on each day.
5	2	33	8
6	3	34	6
8	3	35	5
9	6	36	1
10	3	38	3
11	12	39	5
12	13	40	8
13	12	41	3
14	8	42	4
15	9	43	2
16	14	44	3
17	12	45	1
18	16	46	4

* Gibbon.

19	8	47	1
20	9	48	1
21	8	49	8
22	7	50	1
23	9	51	1
24	10	53	2
25	6	55	2
26	4	56	1
27	7	57	2
28	8	59	1
29	4	60	1
30	11	62	1
31	11	65	1
32	6		

Dr. Latham makes the following observations on the foregoing list.

"Taking, then, the numbers exactly as they are represented in the table, it would appear that fewer cases terminated on the 14th and 21st day than on several days both prior and posterior to each. Out of two hundred and ninety-seven cases, eight only terminated on the 14th, and eight on the 21st.

For a fever to end before the 10th, or to be protracted beyond the 31st day, is unexpected and unusual. Thus a range of twenty-two days embraces the period within which the majority of cases come to their close; and, within this range, the table shews that there are twelve days (above half) more favourable to the termination of fever than either the 14th or 21st. Two equally favourable, and six only less so.

But let us allow a still larger latitude in seeking to know whether fevers are apt to come to their close *some time about* the 14th or 21st day. Let us take a range of three days, by joining each of these with the day immediately before and the day immediately after it; and then, adding together the number of cases which ended on the 13th, 14th, and 15th, and on the 20th, 21st, and 22d, let us see what proportion the sum bears to the number ending on any other three days taken consecutively.

Thus on the 13th, 14th, and 15th days, taken together, twenty-nine cases terminated; and on the 20th, 21st, and 22d, taken together, twenty-four cases terminated. These are our standards of comparison. But on the three days preceding our first standard of comparison, viz. the 10th, 11th, and 12th, twenty-eight cases terminated; and on the three days succeeding it, viz. the 16th, 17th, and 18th, forty-two cases. Again, on the three days preceding our second standard of comparison, viz. the 17th, 18th, and 19th, thirty-six cases terminated; and on the three days succeeding it, viz. the 23d, 24th, and 25th, twenty-five cases.

Finally, then, from the event of these two hundred and ninety-seven cases, no proof can be derived that there is any law of fevers inclining them to terminate upon one particular day more than another, or even *some time about* a particular day, whether it be the 14th or 21st, or any other day."

From all this it appears that the duration of fevers is indefinite. Dr. Latham has the merit of pointing out, in a methodic manner, what most men of sense and experience were sufficiently aware of.

Facts are so much superior to reasons, that any further consideration of the subject would be profitless and tiresome. But we cannot forbear from urging one point which would almost be sufficient of itself, to prove that fever can evince no determinate duration. At the time when the subtle Greeks gave laws to the progress and continuance of this affection, they were not aware of the organic lesions that attend, if they do not produce it. But the examination of the bodies of the dead, has shewn that ulcerations of the mucous membrane of the bowels, and organic alterations in the chest and in the head, are observed in a greater or less degree, in the majority of cases. Our knowledge of such alterations, precludes our belief in the possibility of their displaying particular days of decline and cure. An extensive ulcer of the aggregated glands of the ileum must cicatrize as other ulcers do, and the period of its cicatrization must be greatly modified by the nature of the treatment, the constitutional powers of the patient, and by other influences, frequent in occurrence, and powerful in operation.

V. TWO CASES OF LARYNGOTOMY.*

[Middlesex Hospital.]

Two interesting cases of this description have been related by Mr. Arnott. We will endeavour to present a succinct account of them.

CASE 1.—*Poisoning by Nitric Acid—Laryngotomy—Death.*

J. R. æt. 13, accidentally swallowed some nitric acid, at 11 A. M. of May 13. The description given of the quantity taken was this—"he spat out a table spoonful, but must have swallowed some to enable him to draw breath: he had one gulp." He had breakfasted heartily at nine A. M. Water was given him immediately after the accident, and he was taken to a chemist's, where a solution of carbonate of soda was administered. Vomiting immediately took place, with great effervescence. He was then carried to the Middlesex Hospital, where calcined magnesia was given, by which the vomiting was encouraged. The tongue was swollen and of a citron appearance, the uvula and tonsils were enlarged, and there was great pain around the larynx and pharynx; the pulse was small and feeble. At 2 P. M. the sickness ceased, and he began to doze. At 4 P. M. there was slight coma; respiration was rather hoarse, and the voice was feeble. *Mixture of gum, honey, and chloride of lime, to moisten the mouth.* At 6 P. M. the coma had increased—face pale—pulse 120—surface, especially of the extremities, cold. At 10 P. M., the surface was of its natural temperature—face blanched—pulse fluttering—respiration more croupy and hoarse—lungs apparently imperfectly filled with air. *Fifteen leeches were applied to the throat.*

At midnight, Mr. Arnott was called. He found the boy lying in a state of apparent stupor; his face pale; the skin cool, almost cold; pulse frequent, feeble, and intermittent every fourth or fifth beat; his respiration was rough and difficult, the quantity of air taken into the lungs appearing to the ear applied to the chest to be but small. On being questioned, he raised his eye-lids, and spoke in a whisper. His replies were brief, quickly delivered, and apparently attended with increased suffering; for to other interrogations he answered by a look or slight nod. From the reason just mentioned, he could not readily open his mouth when requested to protrude his tongue, which he did not do. He was unable to swallow even a tea-spoonful of fluid. He had great pain all about the throat, from the front of which leech-bites were bleeding. On lateral compressure of the larynx, additional pain was felt. He had not vomited for some hours. There was no tenderness of the abdomen; and pressure on the region of the stomach gave no pain.

Under these circumstances Mr. Arnott determined to perform laryngotomy. He removed a piece of the crico-thyroid ligament. The sides of the wound in the parts external to the larynx were kept asunder by a bent loop of wire.

After the operation, relief appeared to be experienced, and at 10 A. M. of Tuesday there was less stupor—respiration frequent, but free, and exclusively carried on through the wound—pulse 120. *Calomel.* gr. iij. *2dis horis.* The calomel passed in part, if not wholly, through the wound—respiration more frequent—no increase of secretion from trachea or bronchi. *Injections of beef tea per anum.* At half-past ten P. M the patient died.

Dissection. "No discolouration or abrasion of the integument of the chin or lips. Teeth of usual white appearance. Upper surface of the tongue of a grey and citron colour, the former predominating at the tip and sides, the latter in the middle. The alteration in colour was seated in the cuticular covering of the part, which was separating, and hanging loose for some extent all round the edge of the tongue, and fairly detached from a part of its base, leaving the surface red, the papillæ bare, enlarged, and prominent. Membranous shreds hanging from both tonsils. The pharynx and upper third of the œsophagus were covered by a con-

* Med. Gaz. May, 18, 1833.

tinuous, grey-coloured, slightly lemon-tinted, membrane, which was corrugated and dry, and thrown into longitudinal plicæ, marked also by transverse lines. This membrane, the epithelium of the part, had become completely detached from the two lower thirds of the œsophagus, in which large portions of it remained loose, two or three small spots excepted, which were still covered with it; one of these close to the termination of the tube at the cardia. The surface from whence the epithelium had separated presented almost its natural smoothness, but was a little rosy in colour. On raising the lower edge of the portion of epithelium attached to the upper part of the œsophagus, the subjacent surface was red, which in some points had an arborescent character. The chorion of the œsophagus, especially of the upper part, was thicker than natural. The stomach internally, generally red, contained some yellowish brown, pappy, glairy matters. Its inner surface exhibited no softening or abrasion, or any unusual appearance, with the exception of one place, the size of a crown-piece, on the lesser curvature, on which were scattered a number of ochre coloured spots, the size of a pin's head, the colour in question being seated in the mucous follicles of the part, or gastric glands. The commencement of the duodenum had a healthy appearance.

The edges of the entrance of the glottis were extremely tumid; the surface at the same time corrugated; the colour lemon; but at two places, on opposite sides, of an orange colour. The epiglottis, of a brownish colour, was not merely corrugated, but shrunk in size, so that it could not be brought over the entrance of the glottis. The internal surface of the larynx, through its whole extent, from the opening of the glottis downwards, and the adjoining upper third of the trachea, was covered by a very thin delicate layer of lymph, which could be raised from the subjacent surface of the mucous membrane, which was here pale. Lower down, the mucous membrane of the trachea was of a deep red colour, and with no appearance of lymph. The bronchi also were red, but contained no diseased mucous secretion. The posterior parts of the lungs were loaded with blood."

The next case is one of a different complexion. In it laryngotomy was also performed, and with the same success.

Case 2. *Sore-throat — obstructed breathing—laryngotomy—death.*

J. S., aged between 40 and 50, was admitted into the hospital with fistula perinei and stricture of the urethra. Ten or eleven days after his admission, he was attacked with sore-throat, and on the evening of the same day he lost his voice. On the 19th day his countenance was anxious, the breathing hurried, accompanied by a gurgling, but not croupy; air was heard to pass through the larynx, with a sibilous noise occasionally, and freely into every part of the lungs. Pain was referred to the pharynx, and chiefly to the left side of it. None on pressing together the alæ of the thyroid cartilage. On the 20th day, he expressed relief from the application of leeches, but the respiration did not seem to be improved. During the night his breathing became worse, and the apothecary was called to him early in the morning; he applied twenty leeches.

At 10, a. m. Mr. Arnott was requested to see the patient. He found him apparently sinking under the symptoms above described. The breathing was laborious, attended with a rattling in the throat, the countenance slightly livid, but not anxious. The stethoscope to the chest discovered nothing, the noise in breathing preventing it. A blister having been applied, three days previously, over the front of the neck, (the surface of which was still sore,) rendered manual examination of the pharynx and larynx fruitless. Nothing amiss could be discovered in the posterior fauces by inspection.

Mr. A. determined to perform the operation, to which the patient willingly consented. Lymph was found effused at one place into the inter-muscular cellular substance. The breathing was

temporarily relieved after the operation, but he subsequently sank, and died nine hours after its performance.

Dissection. "Coagulable lymph and pus were found effused at different parts into the cellular substance, all along the front of the larynx and trachea to the bottom of the neck, and some lymph into that of the anterior mediastinum. The pus and lymph were in greatest quantity on the left side of the upper part of the trachea.

In the pharynx, the entrance of the glottis was the seat of three ulcers, which occupied both edges of this aperture, without involving the mucous membrane of the larynx. These ulcers, however, burrowed deeply under this membrane, so that the probe could be passed in some directions, more especially forwards towards the angle of the thyroid cartilage to the extent of an inch. In the interjacent cellular substance of the larynx and pharynx, and amongst the muscles of the glottis, were in several places small abscesses; and on the left side, between the mucous membrane of the larynx and the thyroid cartilage, was one containing a teaspoonful of thick yellow matter.

The superior chordæ vocales might be a little thickened, but the mucous membrane of the larynx presented no other evidence of disease. There was some redness of the upper part of the trachea, increasing in intensity lower down. The bronchi were still more red, and their surface was covered with threads of puriform mucus. The lungs were loaded with blood. There was effusion into both sides of the chest of red coloured serum. The pleuræ were no way adherent."

Mr. Arnott appends a few remarks with which we do not altogether agree. He observes that,—

"The primary affection in this case was no doubt that of the throat; but did ulceration take place first, or were the ulcers the consequence of abscesses of the part breaking? It could not be ascertained from the friends that this man has been the subject of secondary syphilis. The effusion into the pleuræ, and the reddened, perhaps inflamed, bronchial membrane, were the result of laborious respiration from obstructed glottis. If the operation of laryngotomy had been performed sooner, both these consequences might possibly have been prevented; but how ought the burrowing ulcers of the pharynx and larynx, and the abscesses in the cellular substance of the latter, the chief cause of obstruction to the passage of air through the larynx, even if discovered, to have been treated?"

We do not perceive the connexion between the effusion in the pleuræ and the obstructed glottis, for no such obstruction is clearly mentioned in the notes of the dissection. We are informed that "the superior chordæ vocales *might* be a little thickened, while the mucous membrane of the larynx presented no other evidence of disease." If the ulcers "at the entrance of the glottis" occasioned an obstruction, it is not explicitly described.

But, allowing that there was obstruction, there is no necessity for resorting to this mechanical explanation of the pleural effusion and bronchitis. It is a fact which must be familiar to all accustomed to pathological examinations, that few persons die of inflammation of the cellular tissue about the neck, or indeed elsewhere, in whom traces of peripneumony or pleurisy, or both, are not discovered. A few days ago we assisted in examining the body of a patient, who died of diffuse inflammation of the mucous membrane of the stomach and bowels, and in whom there existed a condition of the thorax and its contents, similar to that observed in Mr. Arnott's patient.

We have seen many cases of inflammation of the cellular tissue, in the immediate neighbourhood of the pharynx and the larynx. In some, the seat of the disease was the tissue external to the mucous membrane of the larynx—in others, between the pharynx and the larynx—in others, anterior to the latter—in others, between the former and the spine. Wherever the inflammation was situated, it terminated in effusion of lymph or purulent matter, or both, produced nearly similar symptoms, and was followed by a similarly fatal result. We have said that the symptoms were

similar; we might add that they were usually insidious. The patient appeared, in the first instance, to labour under common sore-throat, but the symptoms assumed a typhoid character, and were disproportioned to the obvious mischief. In some, the difficulty of swallowing preponderated; in others, that of respiration; but, in all, the depression was as remarkable as unaccountable. The first few cases were little understood, the patient dying when the medical attendant was unprepared for the event. But the fatal result of these cases, and the consequent disclosure of their real nature, induced us to form a more accurate and more gloomy prognosis in their successors. We may take an opportunity of bringing this subject before our readers in a more circumstantial manner.

We cannot suppose that laryngotomy will prove serviceable in this affection. The patient does not die from mechanical obstruction to the act of breathing, but rather from the grave impression that deep-seated suppuration always exercises on the system. He dies with typhoid symptoms, as he would if matter were locked up elsewhere. It may be said that incisions should be practised, and the lymph and pus discharged. But the seat of suppuration is neither certain, limited, nor, in general, accessible, and this circumstance, combined with the obscurity of the symptoms, must lead us to indulge in expectations the reverse of sanguine. Probably an acquaintance with the affection will enable us to do more in the way of prevention than of cure—by making us watch with great care all affections of the throat, and inducing us to employ active local depletion in suspicious cases. Calomel is not to be neglected.

We think that the profession are indebted to Mr. Arnott, for the candid and exact manner in which he has made his cases public. They form a very useful contribution to pathology.

VI. Report of Cases, illustrating the Treatment of Gonorrhœa.

(Lock Hospital.)

[By H. J. Johnson, House-Surgeon.]

The treatment of gonorrhœa is confessedly unsatisfactory, often unsuccessful, and frequently empirical. The object of the present report is to display some of the varieties assumed by the disease, and the effects of remedies of different descriptions. As this paper is essentially a statement of facts, there is no necessity for adverting to questions that have occupied much attention, excited considerable and warm discussion, and have not been hitherto decided. I allude to the supposed affinity between gonorrhœa and syphilis, and the secondary symptoms that are said to succeed the former.

The number of cases of gonorrhœa treated at this hospital is necessarily great. They are seldom received into the house, and the circumstances of the patients affect the results, in much the same manner as in the ordinary routine of private practice. Medicines are taken irregularly and excesses are committed, as is commonly the case with patients not submitted to the restraints of hospitals, whatever their station in life may be.

Waiving all attempts at nosological distinctions, gonorrhœa may be divided, for practical purposes, into three leading varieties—gonorrhœa attended with much pain and inflammation—gonorrhœa attended with little inflammation—and gleet. But, independently of these affections, for separate affections they almost deserve to be considered, there are several symptoms or conditions of occasional occurrence, and of greater or less importance. Such are abscess of the cellular tissue of the penis—induration of the corpus spongiosum—lacunar inflammation and enlargement—pain in micturition, unaccompanied by discharge. When we add to this list the more immediate consequences of gonorrhœa—bubo, inflammation of the bladder, and hernia humoralis, I think it will be allowed

that there is ample room for discrimination in the choice of remedies, and judgment in their application.

For my own part, I consider the hope of discovering a specific for gonorrhœa, as unphilosophical and futile. It is not a disease which presents and preserves a sufficient identity in various individuals, to be ever amenable to one plan of treatment. Means may be found of arresting the discharge, but this, so far from being always beneficial, is frequently quite the reverse. It may be urged that as gonorrhœa is a specific disease, a specific treatment may remove it. But I apprehend that the confidence in specifics is rapidly diminishing, and, if syphilis may be cited as an analogical instance, the specific treatment of that complaint is one of the most complex problems in experimental medicine. I mean to imply, that though mercury is really a specific for syphilis, the treatment of that malady by means of its specific is extremely difficult, and requires much caution, judgment, and experience.

As gonorrhœa varies widely in its features in different individuals, it is necessary to consider the circumstances of the case, and to treat the particular assemblage of symptoms. The feature of most importance is the presence or absence of inflammation. In syphilis it is highly necessary to attend to this circumstance; in gonorrhœa it is equally or more so. If mercury is given in the former when much inflammatory action is present, it is probable that sloughing or phagedæna will ensue. If those medicines which check urethral discharge be administered in the latter, inflammation of the corpus spongiosum—of the bladder—or of the testicle, is apt to supervene.

I need scarcely enumerate the symptoms that constitute gonorrhœa attended with much inflammation. It is usually a first gonorrhœa, and there may or may not be general fever. The leading characteristics are, much scalding in the act of making water, painful erections at night, perhaps chordee, and discharge of thick purulent matter. But the latter is not a constant phenomenon, and frequently the secretion grows thin and watery, whilst the other inflammatory symptoms continue.

There are many ways of treating this inflammatory gonorrhœa—by cubebs or copaiba—by salines with antimony—by calomel and opium, with or without purgation—by colchicum—by diluents, with mucilage, nitre, and so forth.

There can be little question that cubebs and copaiba occasionally succeed, even in the inflammatory form of gonorrhœa; but there can also be little doubt that the experiment is one of a hazardous description. I will mention a few cases, in which this kind of treatment was adopted.

CASE 1.—*Gonorrhœa treated by Cubebs—Hernia humoralis.**

Col. C—, who had frequently suffered from gonorrhœa previously, was again affected with it in the Winter of 1832. The discharge was thick and purulent, and there was considerable scalding in micturition. He consulted an eminent and an excellent surgeon, who prescribed the cubebs. I believe that the dose was raised to two drachms four times daily, or to more than that. The discharge was suddenly arrested, and hernia humoralis, with much inflammation of the cord, supervened. The Colonel was laid up with this complaint for two months, and it was necessary to put him slightly under the influence of mercury, before the affection was subdued. With the subsidence of the hernia humoralis, the discharge re-appeared, and was again yellow and thick, but unaccompanied by pain in the urethra. Subsequently he took small doses of cubebs and the discharge gradually ceased.

Case 2. About the time that I visited this patient, I was also in attendance on a young gentleman in the Regent's Park, situated under nearly similar circumstances. The gonorrhœa was combined with a good deal of scalding, although it was not his first. This gentleman was ordered cubebs by an

* The majority of the following cases occurred at the Lock Hospital. It will appear that some did not.

eminent surgeon. The discharge was suppressed, and acute inflammation of the testis and cord succeeded. There was great effusion into the tunica vaginalis of the testis, and suppuration was threatened. When the mouth was gently affected by mercury, this patient also got well.

I might mention many other instances of hernia humoralis, following the administration of cubebs, but this appears to be unnecessary.

CASE 3. *Discharge suppressed by Copaiba—suppurating Bubo.*

W. Andrews, a baker, æt. 29, admitted Sept. 7, 1833, under the care of Mr. Briggs. There was an inflamed and suppurating bubo in the right groin; pyrexia — loaded tongue—irregular bowels. The patient had been attacked one month previously with gonorrhœa. He took copaiba, and, a fortnight after the commencement of the gonorrhœa, the discharge ceased. The bubo then appeared.

The fact appears to be that where there is inflammation to any extent, stimulants or irritants of every description are commonly injurious. Cubebs or copaiba, an injection, a debauch, venereal excitement, or even exercise, aggravate the inflammatory action, which, confined no longer to the anterior part of the urethra, extends backwards to the bladder, and from that, along the mucous membrane of the vas deferens to the testis. Sometimes the urethral discharge is suppressed, but I think that commonly it is only diminished. Whether suppressed or not, it usually returns on the subsidence of the hernia humoralis.

CASE 4. *Acute Gonorrhœa—Inflammation of the Cellular Tissue of the Penis—Hernia Humoralis.*

A gentleman belonging to the University of Cambridge slept with a female in London with whom he was previously acquainted, and had frequent connection during the night. He stated that he experienced almost spasmodic and constant erections. Two days after this, he observed a slight urethral discharge, and tingling in the act of micturition. On the next, or the following day, I was requested to attend him.

The discharge was profuse and thick, the pain in making water great, and the cellular tissue of the penis was so infiltrated with serum, that the glans was almost buried in the mass of the paraphymosed prepuce. I immediately made scarifications with the lancet, and encouraged the bleeding by fomentations. I ordered calomel with active purgatives, and put the gentleman as speedily as possible under the nauseating influence of antimony, combined with colchicum. He was directed to drink large quantities of diluents. It was necessary to repeat the scarifications, and subsequently to apply leeches freely to the pubes, groins, and perinæum, indeed I contemplated bleeding from the arm to some extent, and in another similar case I would certainly adopt this measure. The inflammatory symptoms gradually abated, and after a fortnight or three weeks yellow discharge alone was left. I was about to prescribe some copaiba, when the gentleman imprudently took active exercise. The consequence was severe hernia humoralis, for which it was necessary to affect his mouth to a slight extent with mercury. He recovered from this in about five weeks. The urethral discharge continued, but it gradually subsided spontaneously, and in a month, or thereabouts, after the subsidence of the inflammation of the testis, this too had disappeared.

It is worthy of remark that, in this instance, there was no evidence of the female being affected with any discharge, and probably the excitement of the parts was exclusively the cause of the inflammation of the urethra.

CASE 5. *Gonorrhœa relieved by injections—exacerbation after travelling—chronic painful erections, &c.*

A commercial gentleman, of one of the midland counties, contracted a gonorrhœa, for which he went to an excellent friend of mine who resided in his town. He prescribed injections, with powders, I believe, of nitre and gum. Whatever was the treatment,

the patient was greatly relieved, and would probably have soon been cured. Unfortunately he was obliged to travel to London, and the exertion of the journey, combined, perhaps, with some irregularities of diet, was productive of very injurious consequences. My friend had recommended this gentleman to my care, and he called on me on the morning succeeding his arrival in London.

He was now suffering extreme torture. The desire to make water was incessant—the pain in the act excruciating—the discharge abundant, but not very thick—the erections at night so painful that the patient jumped out of bed every quarter or half hour, and sat with the bare perinæum on the hearth. I tried diluents with mucilages, nitre, and alkalies, in vain. The following plan of treatment succeeded in relieving him.

℞. *Hyd. sub.* gr. v.—*Opii*, gr. j.—*Ant. tart.* gr. j. *M. ft. pil.* ij. *omni nocte sumend.*

Haust. sennæ ℥ *Magnes. sulph.* ℥ss.—*Vini colchici*, ʒss.—*Magnes. carb.* gr. xv. *omni mane.*

Haust. salin. ℥ *Vin. ant. tart.* ʒij.—*Vini colchici*, ℥xxv.—*Tinct. camph. c.* ʒj. *3tiis horis.*

The patient was so brought under the influence of antimony, that he could not, without difficulty, maintain the erect posture. Then, and not before, was the extraordinary suffering relieved; and, after he had been in town for a fortnight, he was able to quit it and return to the country. His mouth was slightly affected by the mercury—the discharge was abundant—there was no pain in micturition, but the painful erections were not quite gone. I have subsequently learnt that this patient again suffered from the latter symptom, and that it passed away on the application of a blister to the perinæum.

The preceding are instances of the acute form of gonorrhœa, and of the bad effects that frequently supervene on the use of stimulants, or the irritation occasioned by improper exercise.

I will now take the liberty of mentioning the plan of treatment that I have found productive of the most beneficial results. I think that, in the great majority of cases, the patient is benefited by the exhibition of a small quantity of mercury. There are two great indications in the treatment of gonorrhœa—first, to reduce the inflammation; secondly, to get rid of the discharge. If there is pain in making water, a few grains of mercury, combined with antimony, and, if necessary, with opium, should be given at bedtime for a few nights, and a purgative draught, combined with magnesia and a little wine of colchicum, should be taken on the ensuing morning. If the inflammatory symptoms run high, salines, with antimony, must be frequently exhibited during the day, and in every case the patient should drink large quantities of mucilaginous diluents, with nitrate of potass, if the scalding is excessive. It may possibly be necessary to employ general bleeding—more frequently it is advisable to apply leeches or cupping-glasses to the perinæum, and immerse the patient in a warm-bath. If, however, the inflammatory symptoms are not unequivocally great, there can be little question that saline medicines are rather injurious than useful. The discharge is apt to become all at once very thin, and a troublesome gleet succeeds. In these cases, we may substitute another combination with the mercury and the purgatives. It consists of the union of the powder of gum tragacanth, nitrate of potass, carbonate of potass, and Dover's powder. This frequently relieves the pain with great rapidity, and, when combined with mercury and aperients, has never been attended with unpleasant results.

The usual effect of the plan of treatment I have here sketched, is to relieve the pain in micturition, and diminish or remove the inflammatory symptoms. The discharge becomes, pari passu, more thin, and frequently more profuse. This is a point which requires much attention. It is highly necessary not to carry mercury or depletion beyond a certain extent. If the discharge becomes very thin, before these means are discontinued, it is much to be feared that interminable gleet will follow.

The difficulty is, to hit the moment when a change of treatment may be wisely ventured. If we are precipitate, the inflammatory symptoms return, and the scene is to be re-enacted;—if we are too late, the prospect of gleet is before us. I think I have observed that it is better to allow slight scalding to exist, when the change to which I have alluded is commenced; I mean that the antiphlogistic treatment should not be so pushed as to remove all pain in micturition. There should be a little, and a very little.

When the suffering is nearly gone, apparently just on the eve of departure, and when the discharge is profuse, and inclined to be thin, but yellow, I would recommend that cubebs, or copaiba should be given. My own predilection is in favour of copaiba, for I think that cubebs has succeeded best in those cases where there have never been inflammatory symptoms. Of this, I am far from certain, but such is my impression. The ordinary combination of copaiba with the spirit of nitrous æther is good, but that with the tinctures of kino or catechu is usually better. Cubebs may be given in combination with copaiba, or they may be exhibited in separate forms upon the same day. I do not dwell upon these points, because I am now advocating a principle of treatment, rather than weighing the advantages of detail.

Whether cubebs or copaiba be administered, the arrest of the discharge is commonly speedy and decisive. A few days will frequently be sufficient to effect an apparent cure. But this is too often delusive. The discharge is stopped, but merely for a time. After a few days it generally re-appears, watery, and a gleet. Now is the period for injections.

As soon as the discharge is manifestly yielding, or has yielded to cubebs or copaiba, I employ an injection of poppies and acetate of lead in the proportion of half a grain to the ounce. This should be used at night, and allowed to penetrate, without restraint, as far as the ordinary impulsion of the syringe will convey it. The copaiba or the cubebs should not be discontinued. In the course of a week or ten days the injection may be repeated more frequently, and its strength may be increased, whilst the other medicines are gradually abandoned.

I do not pretend that this plan of treatment will always be successful, but I think that it is so in the greater number of instances, and I believe that it is always safe. The watery discharge, observed only in the morning, continues for some time, and so long as it continues the injections must be used. There is another circumstance deserving of attention. After all apparent discharge has ceased the patient frequently complains of the lips of the orifice of the urethra being united in the morning by a sort of gum. The patient is liable at any time to a violent return of discharge. I have seen this occur in many instances. Whilst this appearance is observed, the injections should be persevered in, and mild aperient medicine occasionally taken.

I have said nothing of the diet of the patient during the inflammatory stage; it should of course be low. Afterwards a very spare diet appears to dispose to gleet. I have so frequently seen discharge kept up by wine and beer, and so frequently return on a resumption of these stimulants, that very great caution indeed must be exercised in their permission.

In the foregoing remarks I have not attempted to notice various plans of treatment, with which I am not unacquainted. I may without impropriety allude to the application of the nitrate of silver in the first instance—the use of a bougie introduced simply, or smeared with copaiba or with an ointment of catechu—strong injections of the nitrate of silver—large doses of cubebs. Perhaps I may be twitted with impertinence, for expressing my opinion that I am more disposed to admire than to imitate the courage of those who employ, and the confidence of those who submit to these methods. I cannot doubt, from the respectability of authority by which they have been sanctioned, that such measures have been productive of the happiest results. But the evidence of my senses has convinced me, that they

are occasionally accompanied with risk, and that no precautions nor any judgement can in every instance guard against it. I fear that the cure of gonorrhœa is not, and never will be, effected "cito, tutè, ac jucundè." In my own person, I would prefer the tardy security of the second of these attributes, to the hazardous celerity of the first.

I will now relate some cases illustrative of the treatment of gonorrhœa above recommended.

CASE 6.—*Acute Gonorrhœa—Cure.*

Samuel Jacob, æt. 50, admitted as O. P. March 5th, 1833. Yellow discharge —much scalding—chordee. Slight nodule felt in the corpus spongiosum, posterior to the glans. Complaint for four weeks. Has done nothing.

Hyd. sub. gr. ij. *Opii*, gr. j. *Ant. Tart.* gr. ¼. *M. omni nocte sumend. in noct. tres.*

Liquoris potassæ, ʒss. *Vini colchici*, ℳx. *Mucilags. acaciæ*, ʒj. *4tis horis è poculo Decocti hordei.*

April 20th. Soon after taking the medicine the discharge was diminished, and the pain and chordee disappeared. In the latter end of March the discharge ceased, and the complaint was apparently cured; but, having probably committed some excess, it returned after an absence of a fortnight. The return was last week. He has presented himself to-day, in consequence of this.

℞. *Confectionis cubebæ*, ʒij. *ter die.**

27th. Discharge again stopped.

May 12th. There has been no recurrence of the discharge since the last report. He has taken no medicine for the last ten days.

Dismissed cured.

This patient has come lately to shew himself. He has had no relapse.

CASE 7.—*Acute Gonorrhœa—Cure.*

James Shanagham, æt. 18, a labourer, admitted Jan. 23d, 1833. Discharge and scalding, which have existed for five or six weeks.

Liquoris potassæ, ʒj. *Mucilaginis acaciæ*, ʒij. *Aq. dist.* ʒiv. *Capt. coch.* ij. *magna 4ter die è poculo aquæ.*

Haust. sennæ mane p. r. n.

Feb. 19th. Discharge had disappeared for several days. He then left off the medicine, and probably committed an excess. He has now a relapse. Discharge yellow—return of scalding.

℞. *Bals. copaibæ*, ʒj. *Spir. æth. nit.* ℳxxv. *Tinct. catechu*, ʒss. *ter die.*

March 8th. Discharge gone for one week. No medicine for three or four days.

CASE 8.—*Acute Gonorrhœa—almost cured—Death from Cynanche Maligna—Examination of the Urethra.*

Thomas Ross, æt. 22, a servant out of place, admitted O. P. Aug. 23d, 1833. Thin yellow discharge—some pain in micturition—painful erections. Complaint for three weeks.

Hyd. submur. gr. v. *Ant. tart. Opii*, āā gr. ¼. *M. omni nocte in 3 noctes.*

Hs. salin. c̄ *Mag. sulph.* ʒj. *bis die.*

26th. Complains of more pain. Obliged to lie about the streets at night, from poverty.

The patient was received into the house, and ordered a powder containing nitre, tragacanth, and Dover's powder, to be taken every four hours in barley-water. The pills, with two grains only of calomel, were repeated for two or three nights more.

In the course of a few days, the pain had almost ceased, the painful erections were gone, and the discharge was thinner and very profuse. He was ordered copaiba and catechu, and in less than a week very little discharge remained. He was now seized with angina maligna, in its most aggravated form, and in three days he died.

I examined the urethra. There was some inflammatory injection of the mucous membrane contained within the glans, and for an inch or thereabouts

* The composition of this is as follows. It was recommended to me by an intelligent young surgeon, Mr. Parsons. The disadvantage of it is, its extreme nastiness. But to return. The confection contains cubebs, copaiba, carbonate of magnesia, and confection of senna.

posterior to this. The rest of the canal was healthy.

Case 9. *Acute Gonorrhœa—suppression of discharge, and relapse—cure.*

James Nally, æt. 30, a labourer, admitted O. P. July 26, 1833. Yellow discharge, with much pain. The discharge has existed for five days; the pain preceded it.

Hyd. sub., gr. ij. *Opii*, gr. ½, *hâc nocte.*

Haust. salin. c̄ *Tr. hyos.* ℥x. *Vin. ant. tart.* ʒss. *Mag. sulph.* ʒj. *4tis horis.*

Aug. 1st. Excoriation, from the discharge, on the glans and inner prepuce.

Rep. Pil. o. n. in noctes tres. Lavatio tepida.

5th. Excoriations healed. No pyrexia. Discharge whitish—still much pain in micturition, but no chordee.

Omr. pil. et haust.

Pulv. ip. comp., gr. iij. *Pulv. trag. comp.* ʒj. *Magnes carb.* gr. xv. *4tis horis è dec. hordei.*

Haust. sennæ omni mane.

9th. Scarcely any pain; what remains is immediately *after* making water—discharge much less. P.

23d. No pain — scarcely any discharge since the 11th. Has not applied since that day.

Omr. meda.

Injectio bis die. Dec. papav. c̄ *Plumb. acet.* gr. j. *ad* ʒj.

Haust. sennæ, p. r. n.

29th. Return of pain after using the injection—discharge aggravated.

Omr. Injectio.

Hyd. sub. gr. iij. *Opii* gr. ½ *hâc nocte.*

Magnes sulph. sequente mane.

Sept. 2d. Pain and discharge continue.

Rep. Pulveres olim prescripti.

Magnes sulph. p. r. n.

20th. No discharge nor pain for a week. Has taken no medicine for four days.

To take some powders, and re-apply if necessary.

Case 10. *Very acute Gonorrhœa—apparent cure.*

W. Green, æt. 30, a policeman, admitted O. P., June 28th, 1833. Discharge yellow — excessive scalding — painful erections—complaint three or four days.

Hyd. sub. gr. ij. *hâc nocte.*

Haust. sennæ omni mane in 3 *vices.*

July 1. *Hs. salin.* c̄ *Vin. ant. t.* ℥xij. *Tr. hyos.* ʒss. *M. ter die.*

Rep. Haust. senn.

July 5. *Adde Hui. Mag. sulph.* ʒj. *et rep. 4tis horis.*

23d. Cuc. cruent. lumbis, ad ʒviij.

26th. These means have been productive of no relief. The urgency of the symptoms continues—the pain is intolerable. Probably too the nature of his duties as policeman, obliging him to be out and walking all night, has been mainly instrumental in aggravating the complaint.

Om. Meda.

Pulv. ipec. comp. gr. v. *Pulv. trag. c.* gr. xx. *Potass. nitratis*, gr. vj. *4tis horis è dec. hordei.*

Hyd. submur. gr. ij. *Opii*, gr. j. *Ant. tart.* gr. ½. *omni nocte.*

Magnes. sulph. ʒss. *p. r. n.*

Aug. 10th. The effect of these remedies has been remarkable. Scarcely any pain in micturition—painful erections continue, though less troublesome—still yellow discharge.

16th. *Omit. pil.*

Emplast. cantharidis penis infer. parti.

24th. The blister has finally removed all pain, and the painful erections are gone. Discharge less yellow, and not very thin.

Bals. copaib. Sp. æth. nit. ãã ʒss. *bis die. Omr. alia.*

29th. Scarcely any discharge. Complains of itching within the urethra.

Inject. papav. c̄ *plumb. acet. omni nocte. Pulv. rhei* c̄ *magnes.* ℈j. *omni mane.*

Sept. 7th. Says he merely observes a little watery discharge, as the first thing in the morning.

Rep. injectio nocte maneque. P. c̄ pulv.

20th. Patient says he is well.

In the next case copaiba was given at the time chordee existed. The consequence was hernia humoralis.

CASE 11. *Discharge with Chordee—Hernia humoralis—cure.*

James Fowler, a pot-boy, æt. 23, admitted O. P. March 15th, 1833. Yellow discharge—not much scalding in micturition—considerable chordee.—Complaint for three weeks. Has done nothing for it.

℞. *Hyd. submur. Opii* āā gr. j. *omni nocte. Bals. copaib.* ʒj. *Sp. æth. nit., Liq. potass.* āā ʒss. *bis die.*

23d. Discharge much diminished. Chordee continues, as does the scalding. Right testis swollen, tender—epididymis indurated. Affection of testis for three days.

Hirud. xx. *scroto.*
P. c̄ pil. omni nocte.
Haust. salin. c̄ Vin. ant. t. ʒj. *Mag. sulph.* ʒj. *6tis horis.*
Omr. balsamum.

26th. *Rep. hirud.* xij. *P.*

30th. Hernia humoralis cured. Still some chordee.

Opii gr. j. *Camph.* gr. v. *omni nocte.*
Ung. hyd. fort. c̄ Camph. testi.
Mist. mag. sulph. c̄ mag. carb. bis die.

April 10th. Chordee gone. Very little discharge.

20th. *Confec. cubebæ,* ʒij. *bis die.*

23d. Discharge has not appeared for two or three days.

May 4th. Discharge has never returned. Very slight induration of caput minus epididymis left.

The preceding cases appear to be sufficient to illustrate the treatment of gonorrhœa attended with much pain, or with chordee. They seem to prove satisfactorily the value of a small quantity of mercury, combined with opium and with antimony, in relieving the inflammatory symptoms. The cases also appear to shew that considerable pain will sometimes continue, when there is little or no pyrexia, and when it is probable that little inflammation exists. The remedy that exerts most influence on this condition, is, in my opinion, Dover's powder, with mucilage, and nitre, or magnesia. I have heard the liquor potassæ much recommended in the treatment of these symptoms. I have also heard nitre strenuously advocated. I have tried both separately, and I cannot but conclude that the combination I have mentioned is much superior to either.

Pain in the urethra (I am speaking of gonorrhœal cases) may present itself as a prominent symptom under three combinations of circumstances. It may accompany acute inflammatory symptoms, with which I have already alluded to it. It may attend purulent discharge, without other symptoms of much inflammation. Finally, it may exist as a solitary symptom, constituting, for practical purposes, a substantive affection. I have described the treatment which I have found most adapted to the two first varieties of pain, or rather, varieties of circumstances under which pain occurs. The last I shall reserve for separate consideration.

It will hardly be necessary to relate many cases of gonorrhœa attended with little inflammation. Cases of acute gonorrhœa are reduced to this state before they can be cured, and the instances which I have already given have shewn the treatment which appears to answer best. In order that the report may be more complete, I will subjoin a few.

It is this form of gonorrhœa which admits of the greatest variety of treatment. Some employ cubebs—some copaiba—some injections. All succeed, all occasionally fail. It certainly has appeared to me that success is more insured even in these instances by commencing the treatment with some calomel for a night or two, followed by aperient medicine. Then we may exhibit cubebs or copaiba, and

when a decided impression is made on the discharge, injections may be usefully employed. I certainly would not recommend the use of an injection while pain is felt in the urethra. I must say that even in this milder form of gonorrhœa, I have seen much mischief from too stimulating treatment. I will now proceed to the cases.

CASE 12.—*Gonorrhœa with little inflammation—apparent cure.*

James Gillo, a cordwainer, æt. 24, admitted O. P. Aug. 17, 1833. Yellow discharge—some scalding—has had more. Complaint for eight days—has done nothing.

Hyd. sub. gr. iij. *hâc. et cras nocte.*
Hs. salin. c̄ *Mag. sul.* ʒj. *Vin. ant. t.* ℈j. *4ter die.*

20th. More scalding—discharge thinner.

Hyd. sub. gr. v. *Opii. Ant. tart.* āā gr. j. *o. n. in noctes tres. P.* c̄ *haustu.*

24th. Less discharge and little scalding.

Rep. pil. in noctes duas.

26th. Discharge nearly gone—no scalding.

Bals. copaib. Sp. æth. nit. āā ʒss. *bis die—om. alia.*

30th. Much the same.

Bals. copaib. Tinct. catechu, āā ʒss *bis die.*
Inject. dec. papav. c̄ *Plumb. acet.* gr. j. *ad* ℥j. *omni nocte.*

Sept. 7th. Scarcely any discharge visible.

Rep. injectio. ter die.
Pulv. rhei. c̄ *Magnes.* ℈j. *o. n. Om. alia.*

14th. Thinks he has noticed a little water in the morning.

I directed the patient to continue the injection and return if the discharge should re-appear. I have not subsequently seen him.

CASE 13.—*Yellow discharge removed by injections.*

Robert Dixon, æt. 22, had had gonorrhœa for some time, succeeded by severe hernia humoralis. I believe that this was the effect of the injudicious exhibition of copaiba. At the time I first saw him, he had induration and pain in the body of the left testis and yellow discharge. I ordered him calomel and opium at night, salines with the sulphate of magnesia, and the mercurial ointment to the testicle. As these means were not productive of relief, I desired him to apply fourteen leeches to the testicle, and increased the quantity of opium at night. In the course of a fortnight from his first application, the testis was quite well; and discharge alone remained. For this I ordered the injection of decoction of poppies with acetate of lead, and the discharge disappeared.

CASE 14. W. Meadland, a tailor, æt. 21, admitted O. P. August 23, 1833. Discharge copious, thin, and yellow. No pain. Tendency to phymosis. Complaint has existed for two months, and there was much pain in the first instance. Has taken copaiba and the spir. æth. nit.

Hyd. sub. gr. v. *Opii,* gr. ½, *hâc et crast. nocte.*
Injectio plumbi inter præput. et gland.
Bals. copaib. c̄ *Tinct. catechu, bis die.*

26th. Phymosis much better. Discharge nearly gone. *Injiciat inject. in urethram, o. n.*

29th. No further discharge.

Sept. 9th. Discharge returned slightly yesterday, after a debauch with beer.

Hyd. sub. gr. iij. *Ext. col. c.* gr. v. *hâc nocte.*
Magnes. sulph. cras.

13th. Discharge scarcely perceptible.

P. c̄ *Inj. bis die.*

After this the discharge disappeared, but he was desired to continue the injection for a time, and to live soberly.

CASE 15. *Discharge without scalding—cured by injection.*

W. Jones, æt. 17, servant, had go-

norrhœa followed by hernia humoralis. He came under my care as out patient on the 19th July. He had discharge of yellow colour, without scalding. There was some induration of the epididymis. I ordered him cathartic medicine, with colchicum, for a day or two, and then directed him to continue this in the morning, and use an acetate of lead injection twice daily.

Aug. 1st. Discharge has been arrested for two days.

23d. Has had a return of discharge two or three times. There has been none for three days.

29th. No return of discharge.

I have seen this patient since the last report. There has been no return of the discharge. For precaution's sake, he continued to use the injection occasionally.

CASE 16.—*Discharge cured by Copaiba and Injections.*

Thomas Errol, æt. 21, admitted O. P. July 6th, 1833. Yellow discharge for one fortnight. No pain in micturition. Has taken cubebs.

Hyd. sub. gr. v. *hâc nocte.*
Haust. sennæ crâs.
Confect. cubebæ bis die.

14th. No better. Has been drinking porter and spirits throughout. To discontinue these.

Rep. Haust. sennæ et Pil.
Rep. Confect. 4ter die.

24th. Discharge still thick and yellow.

Omr. Cubeba.
Bals. copaib. c̄ Tr. catechu, bis die.
Rep. Pil. et Haust.

Aug. 17th. "Very nearly well."

P. c̄ Bals. semel die.
Inject. Dec. papav. c̄ Pl. acet. t. d.

Sept. 1st. Cured.

I need not pursue the fatiguing detail of individual cases. They resemble each other in their leading features, and a narrative of experiments with cubebs or copaiba would not be attended with any interest. The cases I have mentioned are calculated to illustrate the treatment I have found most useful.

I would make a few remarks on the subject of cubebs. The confidence expressed in it by many surgeons has long occasioned astonishment on my part. I have seen it employed, and have employed it in a considerable number of cases; but it has seldom been my lot to find it productive of a cure. If the case be well chosen, it commonly stops the discharge; but the latter usually returns as soon as the cubebs is omitted, or even whilst it is continued. The cure is much more certain, if injections be combined with the cubebs as soon as the discharge assumes this fugacious character. Nearly the same observation appears to apply to the copaiba.

I have little to say on the subject of gleet. I believe that, in this affection, opposite methods will occasionally answer, but that, still more frequently, none will succeed. I have seen a gleet removed by blue-pill at night, and cathartic medicine on the following morning, continued for some little time. I have also seen a gleet removed by tonics—by turpentine—by injections—by copaiba. More frequently all these means have failed. Some surgeons appear to attach much importance to the use of the bougie. Whether my fortune has been worse than theirs, or whether I have selected the cases for this method with less discrimination, I will not venture to decide; but certain it is, that I never found the bougie succeed. We naturally attach a higher importance to what we see than to what we hear, and, actuated by this impression, I have little confidence in the employment of the instrument. If the cases I have witnessed lead to a preference of any one method, it is to small doses of mercury and cathartic medicine for a few days, succeeded by astringent or stimulating injections. Much as the solution of the nitrate of silver has been lauded, I have seldom seen it beneficial; but more good has been derived from injections of lead or zinc. It is not improbable that stimulating injections have been much abused in

the treatment of both male and female discharges.

Abscess of the Cellular Membrane of the Penis.

This is occasionally witnessed. I have seen three instances during this year. Two were in hospital patients; one occurred in the person of a gentleman. As the latter was the one which I saw first, I will give it the priority.

Case 17.—*Gonorrhœa neglected—Abscess of the Penis—Chronic Induration of the Corpus Spongiosum.*

A gentleman contracted a gonorrhœa. Circumstances rendered it necessary for him to conceal the nature of his complaint, and he mixed in society, and drank wine. When I saw him the whole penis was considerably swollen from infiltration of the cellular tissue, particularly towards the free end of the prepuce, which was somewhat paraphymosed. The integuments were very red. Independent of the general swelling, I thought there was fluctuation, connected with the inferior surface of the corpus spongiosum, an inch, or thereabouts behind the glans. There was thick purulent discharge—the pain in micturition was great—the nocturnal erections distressing. The gentleman had for a few days been treated pretty actively with colchicum and mercurial purgatives.

I immediately opened the abscess, and two or three drachms of pus were discharged with relief. I ordered, if I remember rightly, leeches and fomentations, and calomel with antimony and opium were continued at night, while salines, with colchicum and sulphate of magnesia, were given during the day. The case was attended by a very intelligent friend of mine, and I saw the patient occasionally only.

The swelling gradually diminished, but was long ere it subsided. As soon as the declension of the subcutaneous effusion allowed a more accurate examination, it was found that the abscess was connected with the corpus spongiosum, or its investing membrane, though its essential seat was in the cellular tissue. The corpus spongiosum was generally indurated, from effusion of lymph.

As soon as the patient was enabled to leave his bed, which was three or four days, he was compelled to take exercise, and engage in occupations not calculated to hasten his recovery. It was an object of great importance that the nature of the illness should not be suspected, and fortunately, by much attention on his own part, as well as on that of his medical attendant, the affection, severe as it was, gave rise to no suspicions. The induration of the corpus spongiosum yielded very slowly, and the abscess reappeared once, if not twice. The treatment, consisted in slight affection of the gums by calomel and opium—saline purgatives with colchicum—mucilaginous drinks—alkaline aperients—and repeated blisters to the penis. It is now many months since I first saw this case, and it is only within the last fortnight that I deemed it prudent to attempt to check the discharge. Whilst chronic inflammation was going on in the corpus spongiosum, the discharge was looked on as a natural consequence, and I dreaded that copaiba or remedies of that description would have occasioned fresh abscesses, or hernia humoralis. A fortnight ago the induration of the corpus spongiosum was almost gone. A hard cord was felt in the site of the abscess, connecting the puckered skin with the corpus spongiosum. This cord was probably the contracted cellular cyst. There was no pain—no irritation. I prescribed copaiba and catechu in small doses. I saw the gentleman a few days ago. The medicine had been productive of no unpleasant result, and the discharge was rather diminished. I directed him to increase the dose.

Case 18.—*Abscess in the Cellular Tissue of Penis—discharge—cure.*

John Smith, æt. 20, admitted O. P. Feb. 19, 1833. Penis much swollen—integument red—prepuce disposed to be phymosed. Fluctuation felt on inferior surface of penis, where there is much pain on pressure. Discharge

from within the urethra, with much scalding. Painful erections. Complaint for three weeks. Has been under a medical gentleman who treated him with copaiba.

I opened the abscess and let out half an ounce of pus. It had extended between the integument and corpus spongiosum, but it was not clear if the latter was implicated, or otherwise.

Hyd. sub. gr. v. *o. n. in noctes tres.*
H. salin. c Vin. colchici, ℥ xxv. *Magnesiæ sulph.* ʒj. 6*tis. horis.*
Cataplasma panis et fotus.

The cavity of the abscess rapidly contracted, and the discharge became glairy. In about ten days it had ceased. The acute symptoms had passed away. After an interval, occupied by the employment of alkaline aperients, I ordered the tinctura lyttæ for the thin discharge which alone remained.* The dose was raised to thirty minims four times daily, when the abscess re-appeared, and there was return of irritation. The abscess was opened, and the patient again put upon aperient medicine. Again the abscess closed, and again the discharge grew thin. I prescribed copaiba. The copaiba produced an exanthema, with pains in the limbs, and pyrexia. The discharge was at this time almost arrested. Under aperients, the eruption passed away, and again the discharge returned. Thinking, that it might be kept up by some slight inflammation in the corpus spongiosum, which was rather hard in the site of the abscess, I ordered the following ointment to be applied to the inferior surface of the penis.

Ung. hyd. ʒj.—*Ant. tart.* ʒij. *Iodinæ* gr. x. *M. Applr. nocte maneque.*

This ointment usually occasions severe counter-irritation, of a character intermediate between pustule and vesicle. Two or three applications are commonly sufficient to produce the effect. In this instance it was very satisfactory. The discharge from the urethra diminished soon afterwards.

The patient was now put on copaiba and catechu. The discharge ceased, and on April 10th, he was dismissed cured.

The succeeding case differs in some respects from the preceding.

CASE 19.—*Circumscribed Abscess in the Cellular Tissue of the Penis—Seton employed.*

James Williams, a servant, admitted into the hospital, Aug. 11, under the care of Mr. Briggs.

Excessive induration on the dorsum of the penis, immediately behind the angle of reflection of the prepuce—induration globular, circumscribed, accompanied with a feeling of tension, as from fluid contained in a cyst. Bubo inclined to suppurate in either groin. Looks pale and out of health.

Had gonorrhœa two months ago. It passed away in about a week, under the administration of copaiba. Buboes immediately succeeded, and he has been ill from that time. The induration did not attract his attention until about a fortnight ago.

Hyd. sub. gr. ij. *hâc et crast. nocte.*
Solut. Magnes. sulph. c *Mag. carb. omni alterno mane.*

26th. Swelling increased in size, tender to the touch, fluctuating more distinctly. It was opened through the inner prepuce, and two drachms of pus discharged. Bubo suppurating in two or three points in the right groin.

Pil. Hyd. gr. iij. *o. a. n.*
Inf. ros. c *Mag. sul.* ʒj. *bis die.*
Omr. alia.

Sept. 12th. The abscess continuing to discharge, and the cavity not contracting, a probe was passed into it, through the opening in the inner prepuce, and the point cut upon through the outer prepuce. A seton-thread was then passed and secured, and the probe was withdrawn.

Sept. 20th. Cavity of the abscess almost obliterated. Seton-thread to be withdrawn in a few days.

* The tincturæ lyttæ has been much recommended in the treatment of gleet. I have tried it in many cases and succeeded in none.

INDURATION OF THE CORPUS SPONGIOSUM URETHRÆ.

THIS is a frequent consequence of inflammatory gonorrhœa, especially if a stimulating treatment is adopted. It is a structural condition, of which chordee is a common symptom. Merely painful erections are seldom accompanied with distinct induration in the corpus spongiosum. In chordee the source of pain is usually the corpus spongiosum, somewhere between the glans and scrotum. Where there are erections without chordee, the patient refers his pain to the orifice of the urethra.

It does not seem necessary to relate any cases of induration of the corpus spongiosum. The affection is easily distinguished by examination with the finger, and, indeed, in every case of gonorrhœa, such an examination should be made. Lacunar enlargements and ordinary induration of the corpus spongiosum may exist independently of pain, and copaiba, or injections, might be used injuriously or without advantage, if the surgeon was unacquainted with the actual condition of the parts.

The treatment of inflammation and subsequent induration of the corpus spongiosum is so obvious, that it scarcely deserves observation here.—Leeches or cupping in the first instance, and subsequently blisters to the penis or perinæum. If the case has been neglected in its commencement, the induration is often extremely obstinate. I have seen a gentleman who applied eight or ten blisters to the penis, and was troubled with this affection for many months.

The application of the mercurial ointment has been much recommended and is greatly practised. In trivial cases it will answer well enough, but in those of any severity it has seemed to me extremely inefficient. Small quantities of mercury, purgatives, and bland diluents are serviceable auxiliaries, indeed they are almost indispensable. As a means of counter-irritation the ointment of mercury, tartarized antimony, and iodine, the formula of which was given in the last page, may be strongly recommended. Its action differs in some measure from that of a blister, and I have thought it rather more effectual.

Chordee is often treated in a very empirical manner. It appears to be considered a symptom of irritation rather than of inflammation, and narcotics, with camphor, are liberally prescribed. But true chordee can hardly exist without structural alteration of the corpus spongiosum, and that can scarcely be cured, frequently not benefited, by medicines of this description. The treatment of chordee, is, in general, the treatment of inflammation and induration of the corpus spongiosum, and on this nothing further need be said.

Painful erections are much more amenable to narcotic treatment. I think that the combination of Dover's powder with tragacanth, and magnesia, nitre, or rhubarb according to circumstances, is the most effectual remedy for this symptom. Occasionally opium and camphor, opium and tartar-emetic, conium morphia, &c. succeed. But even painful erections cannot always be treated in this manner. We must investigate their cause. I lately saw a gentleman who was greatly annoyed with this unpleasant occurrence. It appeared that he had always experienced an amatory, indeed a salacious disposition, and was in the habit of very frequent connexion. When suffering from gonorrhœa, he had of course desisted from gratifying his inclination, and the painful erections seemed, on a close consideration of the case, a consequence of unappeased desires. Opium had been tried, and had occasioned an aggravation of the complaint. I directed this gentleman to be cupped once or twice on the perinæum, to abstain from malt or vinous liquors, to eat very little meat, and to take some active purgative medicine every morning. This treatment was followed by an almost immediate disappearance of the erections.

ENLARGEMENT OF THE LACUNAR GLANDS OF THE URETHRA

This is not uncommon, in connexion with inflammatory gonorrhœa. In that form of the complaint, the mucous membrane is always acutely inflamed, and

it is not surprising that the lacunæ, and the corpus spongiosum should at times be implicated. The lacunæ, however, become the seat of inflammation and subsequent induration, in that form of gonorrhœa in which there is little inflammatory action. The most common situation of the affected lacuna, for commonly it is only one, is a little posterior to the glans. The induration, about the size of a pea, or larger, is generally felt from the under surface of the penis. Occasionally it is connected with the superior wall of the urethra, and is distinguished by firm pressure through the flaccid corpora cavernosa. In the first stage there is pain on pressure, in the second there is none.

This affection is commonly brought on, or if not brought on, it is increased and aggravated, by stimulating treatment. Cubebs, copaiba, or injections should never be given whilst the nodule remains. When attending the inflammatory stage of gonorrhœa, the treatment adapted for that stage is adapted for it, and under such treatment the lacunar enlargement usually recedes. Of this I have seen numerous examples. But when a nodule remains, unattended with inflammatory symptoms, the treatment I have found most useful, is mild aperients, abstinence from much animal food and from stimulants, and counter-irritation. I have seen some cases, in which attempts have been made to arrest the discharge during the presence of a lacunar nodule. Such attempts have done no good, but rather tended to a contrary result. It will only be necessary to relate one case illustrative of this affection.

CASE 20. *Discharge—Nodules connected with the Urethra — removed by counter-irritation.*

Robt. Mackenzie, æt. 32, a tailor, admitted O. P. July 26th, 1833. Yellow discharge. Little pain in micturition. Nodules felt connected with the corpus spongiosum urethræ. They are apparently chronic enlargements, with induration, of the lacunæ. The complaint has existed for two months. Has been taking cubebs, copaiba, &c. without any benefit.

Hyd. sub. gr. ij. *o. a. n.*

Solut. cathart. o. a. m.

Pulv. rhei. c̄ Magnes. ℈j. *bis die.*

Aug. 6th. P.

Infricetur penis infer. parti Ung. hyd. c̄ Iodin. et Ant. tart.

11th. Mouth slighly affected. Nodules much reduced in size—discharge much the same.

Omr. pilulæ.

19th. Discharge considerable, yellow, thin. Nodules very much reduced, but not quite gone.

Dec. papav. ℥j. *Plumb. acet.* gr. ½. *pro inject. o. n.*

P. c̄ pulv. et solut. cathart.

23d. Nodules no further diminished.

Rep. unguentum.

29th. Discharge rather increased.

Hyd. sub. gr. iij. *Opii,* gr. ½, *hâc nocte et crastinâ.*

Sept. 6th. Better.

P. c̄. pulv. bis die et inject. o. n. Omr. alia.

20th. Nodules have quite disappeared, since the last counter-irritation. The discharge alone remains. It is evident that the injection has not been serviceable to it. Ordered copaiba and catechu.

The object of the case was to display the treatment of the lacunar nodules. They were probably brought on by the perseverance in cubebs and copaiba in the first instance. The counter-irritation effected by the ointment in this case was excessively severe, yet six or seven weeks had elapsed before the nodules had quite disappeared. The unguentum hydrargyri is occasionally employed for their removal. It appears to me to be insufficient for that purpose; at least, it has been so in several instances which have fallen under my observation.

PAIN IN THE URETHRA, UNCONNECTED WITH DISCHARGE.

I mentioned, in some remarks upon pain in the urethra, that it seems to occur under three conditions—in inflammatory gonorrhœa—with thin discharge, unattended with inflammatory symptoms of any severity—and, finally, as a solitary symptom after others have disappeared. I am ignorant of the condition of the urethra which occasions it, and all that I can do is, to offer an ac-

count of some experiments, conducted with a view to ascertain the most successful method of treatment.

Case 21. *Pain in the Urethra—removed by Alterative Treatment.*

John Holliwell, æt. 52, admitted O. P. April 19th, 1833.

Very slight pain in micturition, referred to the inferior surface of the penis. It has existed for seven weeks. There was discharge in the first instance. For the last two days has again had slight and thin discharge.

Confection. cubeb. ʒij. *ter die.*

29th. Discharge almost gone—pain still troublesome.

Emp. canth. penis infer. parti.

Rep. Confect. o. m. tantummodò.

May 13th. Discharge has quite ceased for many days. Pain continues.

Liquoris potass. ℳxxv. *ter die.*

June 9. No better. Pain continues; it is acute, and felt always in the act of micturition—no feeling of hardness, nor of any thing unusual communicated on examination. Patient of a florid aspect—tongue moist, rather loaded.

Pil. hyd. gr. iij. *Pulv. ipec.* gr. j. *M. omni alt. nocte sumend.*

Mist. cathart. o. a. m.

July 5. Pain in micturition nearly, if not quite gone. Mouth has not been affected. Soon after this the patient discontinued his attendance, and I have reason to believe that he was quite well. This patient had enlarged prostate.

Case 22.—*Pain in micturition—not cured.*

John Robinson, æt. 19, admitted O. P. with pediculi, and pain in micturition, attended with little or no discharge. The pain had existed for eight or nine months.

The pediculi were speedily removed by a lotion of spirit of wine. The following means were then tried in succession, for the treatment of the pain in micturition. The ointment of tartar emetic—the ointment of mercury, iodine, and tartar emetic—aperients of the sulphate, and carbonate of magnesia twice daily—blister to the penis—salines with sulphate of magnesia—and the liquor potassæ.

The pain was somewhat mitigated, but far from cured, by these measures, and, shortly after the commencement of the exhibition of liquor potassæ, the patient discontinued his attendance.

Case 23.—*Sores—Pain in Micturition—cure.*

Mordecai Barnett, æt. 43, admitted O. P. April 20, 1833.

Two elevated sores on left side of penis, near scrotum. They appear to have been originally pustules. Has been for some time under treatment ineffectually.

Pil. hyd. gr. v. *omni nocte.*

Infus. ros. c̄ *Mag. sulph.* ʒj. *o. n.*

May 4. Sores healed—elevated cicatrices remain. Complains of much pain in the urethra after micturition. No urethral discharge.

Emplast. canthar. penis.

12th. Still complains of much pain in the urethra, now felt, however, before micturition.

Liquor. potass. ʒiss. *Pot. nitrat.* ʒss. *Muc. acaciæ,* ʒss. *Tr. hyos.* ʒiv. *Aq.* Oj. *M. bibat. vicibus partitis quotidie.*

P. c̄ *pilulis.*

Magnes. sulph. ʒss. *o. m.*

May 28th. Scarcely any vestige of sores. The pain in micturition, though relieved, continues. Mouth has been gently affected.

Omr. pil.—P. c̄ *mist. et mag. sulph.*

June 15th. Has lately had connexion with his wife after a long absence from her. Believes that she has no venereal complaint. A fresh pustule has appeared on the dorsum of the penis, with induration of its basis.

Cataplasma panis. P.

18th. Sore better.

H. sal. c̄ *mag. sul. t. d.*

22d. Sore larger—yellowish on its surface—its base more hard and tumid. Looks pale.

Dec. cinch. c̄ *sod. carb. bis die.*

Haust. senn. altern. mane.

29th. Sore spreading sloughily towards the pubes, and assuming the herpetic character.

Dec. sars. c. Oss. *Ext.* ʒj. *quotid.*

P. c̄ *h. senn.—Lot. nig.* c̄ *catap. pane.*

July 6th. Sore has ceased to spread.

20th. Sore just healed. During the time occupied by the preceding reports, the pain in micturition has continued,

with little alteration. There is and has been no urethral discharge whatever, nor has any alteration in the urethra or corpus spongiosum been perceptible. A bougie has been passed. It aggravated the pain.—*Cuc. cruent. perineo. ad* ℥x.

26th. Pain nearly gone since the cupping. Sore healed.

After this, the urethral pain quite disappeared. The patient attended as O. P. until the 17th of August, when he was finally dismissed, quite well. He has shewn himself subsequently, and has had no return of his complaint.

These are all the cases of this affection which it is at present in my power to relate. It must be owned that the treatment is not satisfactory, which may perhaps be owing, in some degree, to our ignorance of the actual condition of the urethra. The plan that appears to promise most is moderate purging with mercurial alteratives, and local depletion or counter-irritation. Attention to the history of the local complaint, as well as to the actual condition of the patient—the state of his digestive organs—his occupation—diet, &c. may perhaps be useful in assisting the choice of remedies.

Miscellanies.

I. ALDERSGATE DISPENSARY.

We little expected that, in the nineteenth century, and after the general feelings of the English nation had given birth to a reformed Parliament, we should see a return of the worst and most venal days of ancient Rome! The Prætorian bands put up the imperial throne to public auction, and it was knocked down to the highest bidder! So, the majority of governors of the Aldersgate Dispensary, in imitation of the Prætorian bands, have passed a law, by which the fullest purse, with the emptiest head, may fill the most important medical and surgical offices of the institution! If the governors had fairly and unequivocally stated that each new appointment would be publicly sold, for the *benefit* of the institution, they would have been entitled to the credit of candour, to palliate an act of suicidal mania—to give it the most gentle term; but when they enact a sham law against bribery and corruption in the elections, knowing, as they do, that it is only a mockery and an insult to common sense, they are entitled to no other appellation than that which we have given them! In the simplicity of their hearts, they thought that a rich harvest would be reaped, at every vacancy, by the bribery system; whereas, the open acknowledgement of such a system will destroy all competition, and there will not be a single bribe offered at each election. The honour of the medical profession is now put to a trial. We hope that a few thoughtless members will not compromise its dignity. If they do, they run a fearful risk—they take upon themselves a most dangerous responsibility. No time or circumstance can ever wipe away the stigma that will attach to physicians or surgeons, who step in to take office under such a system of open bribery and corruption. It is no palliation or excuse, that such a law should have existed at the beginning of an institution, when funds were to be raised to give it impulse. Such a law was never defensible—and, after being revoked, it is insulting to the moral sense of mankind to renew it. Those medical officers who become candidates for the situations resigned, should recollect that they are betraying the character of their brethren at large; for what will the world think of that profession, which rushes voluntarily to the support of a law the most iniquitous, profligate, and venal, that could well have been devised? They will injure themselves—injure the institution—and, what is worse, they will injure the whole faculty in the eyes of every honest man! Too much praise cannot be given to the late medical officers of the Aldersgate Dispensary for their prompt resignation, as a mark of their reprobation of this disgraceful regulation.

Since the above was written, we find that those candidates who put forth their offers in the newspapers, have thought proper to recal them. This is the only prudent step they could take, though it will not entirely retrieve their character, since it was the com-

sel of their friends, or the indignant voice of the profession, that caused the recantation. Nevertheless, they have now acted right—and perhaps their first step, imprudent as it was, will be beneficial to the right cause, by more completely deterring all respectable men from following in the same line. A period has arrived, when medical men should come forward firmly to vindicate their rights, and free themselves from the despotic insolence of non-professional governors, and committees of charitable institutions. It is most provoking to see these petty tyrants domineer over and annoy the medical officers, who have all the trouble, anxiety, and responsibility. The Aldersgate governors have received a lesson which they will not readily forget! We strongly advise the medical officers of other charities, especially in the country, to imitate the example of their metropolitan brethren, and insist on proper laws, or resign their places. After what has happened here, there will hardly be found any respectable members of the profession who will truckle to committees, and thus degrade the corps to which they belong.

II. Royal College of Surgeons.

The Council of the College has sent forth a "*statement,*" or exposition of the past and present state of the College, in reference to finances, library, museum, lectures, &c. by which it appears that the institution, since 1800, has been in a very flourishing condition. At the above date the property of the College did not exceed fifteen thousand pounds sterling, whereas the average receipts of the College for the last three years have amounted to upwards of eleven thousand pounds per annum! The average expenditure has been rather above eight thousand pounds per annum. The foregoing receipts are chiefly made up from the diplomas granted to surgeons—but as there is no law to compel the student to take out a diploma on commencing practice, the revenue from that source is somewhat uncertain.

The museum requires a considerable sum annually, both for conservation, and for additions. It is open to all properly introduced visitors from ten till four o'clock, on Mondays, Wednesdays, and Fridays—and to scientific foreigners every day. The library appears to be rapidly increasing, and already contains 16,000 volumes of standard works, ancient and modern. It is open every day from ten till four o'clock, for all members of the College and their articled students—except during the month of August.

"When the College received its Charter from the Crown, it derived no assistance of any kind from the other branches of the legislature: The Charter was simply permissive, allowing the Court of Examiners to examine those who might voluntarily present themselves, but giving them no legal authority whatever, to compel practitioners in surgery to obtain their Diploma, nor to prosecute those who took upon themselves to practice without it. The College, therefore, possessing no other influence than that of opinion, was left to rest altogether on its own character. Under these circumstances, it would never have advanced to its present state of prosperity, if it had failed to obtain the confidence of the profession and the public; and the best proof that it has succeeded in this object, is to be found in the increased and increasing number of the Members. In the first two years after the establishment of the College, the Diploma was granted to 300, and in the last two years to not fewer than 770 Members."

These facts speak very strongly in favour of the general estimation in which the College diploma is held by the public; but they by no means prove that the said College, in respect to its government, is in equal estimation with the profession. The general public know nothing, and care nothing about the management of affairs in Lincoln's-Inn Fields—all they know is, that the profession of a diploma from the only constituted surgical authority in the kingdom, is an indication that the individual has received a proper surgical education, and undergone a regular examination. When the council tells us that they possess no power to compel

students to become members of the College, they do not exhibit an overplus of candour. The student *is* obliged to become a member, if he has any ambition to succeed in his practice, either in town or country. In town, he is not eligible to fill any public situation in hospitals or dispensaries, without the diploma—and, in the country, he well knows that a contemporary, with the diploma in his pocket, would soon expose him to the distrust of the place where they reside. Every body knows that it is not from any love to the College, or admiration of its government, that students present themselves for examination; it is from the necessity of having a testimonial of this kind, in practice—and there is no other source whence it can be procured, in this country, than the College of Surgeons. Let not the council of the College, then, lay this flattering unction to their souls —or rather let them not expect to convince the profession, by such a piece of sophistry, that the institution is on the very best establishment, and guided by the best and wisest principles. While the principle of self-election is the grand and ruling principle of the College, it will be looked upon as a close borough, and consequently a corrupt one. It will never give satisfaction to the great body of its members, while the old leaven of corporation monopoly pervades the mass, and poisons, or is supposed to poison, the vital principle of general utility.

We are no enemies to the College of Surgeons—on the contrary, we think it has done much good, and that it will do much more. We would only admonish the rulers of that body not to shut their eyes to the change of times and circumstances around them; but to make every practicable reform in good time.

III. MEDICAL REFORM.

College of Physicians.

"TO THE HONOURABLE
THE COMMONS OF THE UNITED KINGDOM OF GREAT BRITAIN AND IRELAND IN PARLIAMENT ASSEMBLED,

The Petition
OF THE
UNDERSIGNED PHYSICIANS, PRACTISING IN LONDON,

HUMBLY SHEWETH,

THAT the Charter of the Royal College of Physicians of London was granted by Henry the Eighth, for the advancement of Medical Science, and for the protection of the Public 'against the temerity of wicked men, and the practice of the ignorant.'

That six Physicians were named in the Charter, who, together with all men of the same Faculty, then resident in London, were constituted One Body, Commonalty, or perpetual College.

That the perpetuity of the College was to be kept up by the future admission of all men of the same Faculty into the College.

That several of the six Physicians named in the Charter, studied at, and possessed Degrees from, foreign Universities; and that no distinction is mentioned, as regards the University where a Physician may have obtained his degree.

That all Physicians entitled to Practice in London, are equally entitled, under the Charter, to Admission to the Fellowship of the College.

Your Petitioners are prepared to show, that Bye-Laws have been framed, and long acted upon, by the College, which are directly opposed to, and in violation of, the letter and meaning of the said Charter.

That the Physicians practising in London, are invidiously divided, by the Bye-Laws of the College, into Two Orders: one is denominated Fellows; the other, constituting by far the majority, is designated (and by implication degraded) by the term Licentiates.

That the Fellows have usurped all the corporate power, offices, privileges, and emoluments, attached to the College; that the Licentiates do not participate in these benefits, but are illegally excluded from all the offices, and any share in the management of the Corporation; and so far is this principle of exclusion carried, that the Licentiates are not even admitted to the Library or Museum of the College.

That there exists no foundation in the Charter, or in the Acts confirming it, for such distinction of orders, and consequent exclusion from all privileges.

That, according to one of the Bye Laws, no Physician can claim admission as a Fellow, unless he has graduated, or been admitted *ad eundum* at the Universities of Oxford or Cambridge, where medicine is imperfectly taught; while Physicians who have graduated at other British or Foreign

Universities, celebrated as Schools of Medicine, are unjustly excluded from the Fellowship, by this obnoxious Bye-Law.

That the College was admonished from the Bench, by the Lord Chief Justice Mansfield, to amend their Bye-Laws, in reference to the admission of Licentiates into the Fellowship: that, influenced by this censure, the College framed other Bye-laws, deceptive in their character, which, whenever they have been acted upon, have tended still further to depress and injure the order of Licentiates.

That the College demand and receive a large sum of money from the Fellows and Licentiates, for the supposed privilege of practising as Physicians, within a circuit of seven miles round London, and that they do not and cannot protect them in this privilege.

That the Graduates of Oxford and Cambridge are obliged to be Members of the established Church of England, and, consequently, all Dissenters are excluded from claiming the Fellowship: this, your Petitioners consider as a grievous injustice, and an act of intolerance unbecoming the present age.

That these invidious Bye-laws, made in the spirit of Corporate Monopoly, have involved the College in continued litigation, and created a jealousy between the Fellows and Licentiates discreditable to the Members of a liberal profession.

That your Petitioners, with deference, submit, that the College of Physicians, as at present constituted, is wholly inadequate to the due regulation of the Medical Profession in this Country and the protection of the public;—and further, that the Charter of the College in no way provides for the practice of Physicians in the several Counties of England and Wales.

Confiding in the wisdom of Parliament, your Petitioners therefore

Pray, that your Honourable House will institute such inquiry into the state of the Medical Profession in this Country, and the College of Physicians in particular, as will lead to the framing of laws, by which the evils complained of may be removed.

And your Petitioners will ever pray, &c.

Gilbert Blane	Whitlock Nicholl
Henry Clutterbuck	A. T. Thomson
George Birkbeck	John Sims
W. Somerville	James Copland
Alexander Morison	George Gregory
Thomas Brown	J. C. Somerville
Alex. Henderson	James Bartlet
Charles F. Forbes	John Webster
Charles Locock	Tho. Harrison Burder
Neil Arnott	Thomas Davies
Roderick Macleod	T. Southwood Smith
John Vetch	David Barry
W. Gairdner	Charles Holland
William Russell	John Foley
Hugh Ley	Francis Boot
James Clark	R. M. Kerrison
Robert Lee	C. J. Roberts
Marshall Hall	William Stroud
William Whymper	James Johnson
Thomas Hodgkin	Edward Rigby
C. J. B. Williams	Robert Richardson
Alexander Tweedie	G. G. Sigmond
Henry Davies	James Hope
J. W. Crane	A. T. Holroyd.
Theodore Gordon	

It is needless to tell our readers how long and how often we have conjured the College of Physicians to revise their laws, and put themselves in some degree of accordance with the spirit of the age, before a burst of indignation came from their helot licentiates in London, and their brethren in general throughout the kingdom. But, learned as the collegiates are, they did not understand, or they would not believe, the well-known truth—

"Quem Deus vult perdere prius dementat."

No! Like the Jews in the Temple, nothing, could persuade these ELECT that their sacred, time-hallowed, king-blessed, monk-erected edifice was vulnerable in any quarter, fallible in any point, or capable of improvement, even in the most trivial particular! All was Millennium with the College—they were the heaven-born Esculapii of England—who sucked in medical science, and practical experience, with their Greek and Latin on the Cam and the Isis! The reign of Tory corruption and Corporation monopoly was never to have an end—the statutes of Henry the VIII. were as pure, as indissoluble, as those delivered on Mount Sinai, amid thunders and lightnings, to the wondering Israelites. It was incredible that a band of fifty Helots should stand forth in London alone, and dare to petition the legislature for a dissolution of their chains! Still, even this significant symptom will have little or no effect on the College. The bigotted portion of

the collegiates will listen to no reason. You might as well preach liberty and equality to the Autocrat of the bears, as propose a single liberal measure to the high-church party in the College. They consider themselves as the nobility of the profession, and to take away from them the insignia of their order, would be to deprive them of the only distinction between themselves and their humbler brethren. But we are wasting words on a part, when the whole stands in need of reconstruction. It is of comparatively trifling consequence, what becomes of the College of Physicians. If they do not open their doors to the Licentiates, and to all qualified physicians, these physicians will not trouble themselves about entering the portals of the College at all. In the present state of things, and, *à fortiori*, in future, the College possesses and will possess no legal power over physicians settling in the metropolis; and they are really fools who shall give themselves any trouble about taking out an insult (which is the proper name of the *license*) at the expense of 57 pounds sterling. The College never again will dare to prosecute a regular physician (and the irregular one is their protegé) for the practising in London without a license—that is certain. The only anchor of hope which they have left, is the refusal to consult: but this anchor will soon drag the bottom, and refuse a stay to the drifting ship. The public will shortly become acquainted with the reasons on which these refusals are based, and will disregard them accordingly. Neither have the candidates for metropolitan practice much to fear from the ban of the College as to consultations. Little need they expect from their patronage at any time, and little need they fear their refusals to participate in the Guinea trade, when the fee presents itself. With such a list of Licentiates as the metropolis now presents, the non-licensed physician (always provided that he is duly qualified) can experience no difficulty. He has only to produce the College list itself, and tell the patient that the *minority* refuse to meet him on medico-political grounds; while the overwhelming *majority* are ready to consult with him—and the charm of the BAN is broken at once.

But again and again we exhort our brethren of every denomination, from the Pentland Frith to the Isle of Wight—from the Shannon to the Humber, to forego all party disputes, to waive all corporate interests, and join in the "universal prayer" for PARLIAMENTARY INQUIRY. This is the measure from which we have every thing to hope—this is the test from which the enemies of reform have every thing to fear! Let the physicians, surgeons, and general practitioners of every city, town, and village of the united kingdom, forward petitions to the next parliamentary assembly, even if they contain but three words "*Medical Parliamentary Enquiry*"—and the object will be obtained. Fortunately for our cause, we only want the light to be let in on darkness, and the deformity of our laws respecting medicine, will be apparent to the meanest capacity. Our Irish brethren are bestirring themselves, and petitions are getting ready in various parts of the sister Isle. It is time for the English faculty to shew activity.

We think it would be premature, if not injurious, to be perplexing the minds of the profession and society at large, by proposing panaceas and nostrums for the disease, before the history and symptoms are fully delineated before the legislature. If a parliamentary inquiry be granted, the Committee or Commissioners will have ample means of drawing from individuals, not only the nature of the evil, but the probable remedy for it. Then will be the time for specific proposals. Meantime, during the recess, every member of the profession, who is not sunk in apathy, and perfectly contented with things as they are, should endeavour to explain to those members of Parliament, with whom he may come in contact, the chaotic state of our medical constitution, and the urgent necessity there is for a thorough—indeed *radical* reform. This is a precaution which should not be neglected. More might be done in this way than by interminable lucubrations in our medical journals, which never reach the public ear.

Mean time an association is orga-

nized in the metropolis, which will prove the nucleus, or the punctum saliens, for similar associations in the provincial cities and large towns. Nearly a hundred of the most talented, active, and liberal physicians of London, have entered into league, with the certain prospect of being joined by nine-tenths of the physicians of the United Kingdom, to further the cause of medical reform, by every possible means. Their proceedings will be made known to the public—and we have little doubt that their voice will be heard in the next Session of Parliament.

As might be expected, some of the crawling sycophants, who would go on their knees from Piccadilly to Pall Mall East, kissing the mud and making an abject salam to the President at every step, for admission into the temple, are hanging back!! Yes! These are the men who would sacrifice the whole profession for the sake of having "FELLOW," attached to their names!! We trust that the day is nearly at an end, when the Machiavelian practice of crushing the spirit of the Licentiates, by plucking from them one or two annually, to swell the tail of the FELLOWS, shall have operative influence. Those who *hereafter* accept such degraded honours, should have the finger of scorn pointed at them, from one end of the kingdom to the other. They will be traitors to the cause of medical reform, ten thousand times more abject than the renegade Christian who tramples on the Cross, denies his Saviour, and embraces Islamism, for a few thousand piastres!

If we had a hundred tongues, we would reiterate the word "PETITION." There can be no difficulty in such a procedure—no excuse for not joining in the good cause. The Licentiates of London have led the way—not for themselves alone, but for the profession in general. Their example should be followed from one end of the kingdom to the other—not by any one class in particular; but by physicians, surgeons, and general practitioners united. The burthen of the prayer should be, that medical polity in this country, is a chaos of clashing interests and injurious regulations, which nothing but a Parliamentary inquiry can reduce into order, for the benefit of the community. It is needless to expect any salutary measures from either of the three corporate bodies now existing. They are all and each working for their own separate interests, and care not a farthing for the good of the profession at large. The work of reform must be taken out of their hands entirely, and placed in those of our legislators. If petitions are not presented at the very earliest period of the next Session, from the whole profession, we shall have a ROYAL COMMISSION—a packed Jury, constructed under the influence of a court faction—and then adieu to all wise legislation!

Obituary.

DR. DARWALL.

We have the melancholy task of recording the death, on Saturday, the 10th of August, after a short illness, of this eminent and respected physician; which lamented occurrence was occasioned by an injury received in the examination of a dead body, at the Birmingham Hospital, on Tuesday, the 30th July. During that day, Dr. Darwall was unsuspicious of having incurred any danger. He pursued his usual avocations—visited his patients—and, in the evening, walked in the Botanic Garden. Very early in the morning of Wednesday he was attacked with severe shivering, to which violent re-action soon succeeded, with inflammation of the absorbents of his left hand and arm. Although these symptoms subsided, under the skilful attentions of the professional friends who were soon assembled round him, his system never recovered the shock; and after eleven anxious days, during most of which sanguine hopes were entertained of his recovery, he breathed his last, in the 40th year of his age. The shortness of his last illness—its accidental origin—and the abrupt cessation of his extraordinary mental activity, are circumstances so painfully afflicting to

his family and to his immediate friends, that even the very general concern which has been occasioned by these sad events, cannot, for the present, be expected to soften the poignancy of their sorrow. If great mental acuteness—if extensive learning—if a profound knowledge of medicine, united with the highest practical skill—if industry the most indefatigable, and benevolence no less enlightened than it was ardent, could have been any protection from an early death, the public might yet, for many years, have benefited by his ability and his experience.

For about two years before his death, he held the office of physician to the General Hospital—long an object of his ambition, and to which he was elected by the Governors with the most flattering marks of consideration; individuals of all parties concurring in the appointment, and more than one of his medical competitors seceding from all opposition to claims which rested on every merit that could entitle a medical practitioner to distinction. One of his first steps after his appointment, was to commence a series of lectures on such cases as he deemed the most instructive; from which, if his life had been prolonged, the pupils of the Hospital would doubtless have derived great advantage. His work on the Diseases of Children, published about three years since, is characterized by all that should distinguish the production of a practical physician; and the remarks on Spinal Irritation, appended to it, excited very general attention from the profession. He had proceeded some way in a History of Medicine, the first part of which is, we believe, about to be published under the superintendence of the "Society for the Promotion of Useful Knowledge." His contributions to the *Cyclopædia of Practical Medicine*, on the Diseases of Artizans, and on the different varieties of Dropsy, possess the highest value. He was engaged in the preparation of some papers on the Curability of Consumption, intended for the Transactions of the "Provincial Medical and Surgical Association;" which, as they would have been, like all his writings, the result of long observation and a sound judgment, it is to be hoped may be found sufficiently advanced for publication. At the late great meeting of medical men, held at Bristol, he was unanimously appointed to deliver the Oration at the next anniversary of the Association, to be held at Birmingham, in July, 1834.

His opinions on some of the most important questions which divide the sentiments of mankind might be considered as carried to some extreme; and easier natures might reproach him with being too much a prey to care and anxiety. These (if faults they were) were the only faults which clung to him. But those who knew him best well knew, that even in these respects, what seemed blameable to such as knew him less, did but arise out of the uprightness of his mind, and his scrupulous conscientiousness. In him, what are called High Tory and High Church principles, had not effaced any of the best feelings of humanity, or interfered with his friendships. He *spoke* openly, and boldly, and at all times; but to *do* any thing cruel and unkind was not in his disposition. He felt warmly for what he conceived to be the best interests of his country; and he despised all the various disguises of political dishonesty. His piety also was unaffected, but fervent and sincere, and influenced all his thoughts and actions. His opinions on all points of policy connected with his own profession were in the highest degree liberal and judicious. And if, as regarded the management of his own mind, he too severely tasked his own powers—a severity which, perhaps, prepared him too surely to sink under accidental injury—he was ever considerate and indulgent towards those to whom such incessant exertions were impossible.

For his afflicted widow, for his bereaved children, for his grieving friends, who must long mourn the loss of such a man there is some consolation in the reflection, that he whom they admired and loved, and whom they now lament, lived and died with so much honour, and a reputation so unblemished—that the longest life could have done no more

than afford a longer opportunity for the exercise of virtues of which he had proved himself to be eminently possessed. But there is a further and deeper consolation in the certain conviction, which none can fail to entertain who habitually refer worldly events to their Great First Cause, that the death of this distinguished physician, like his well-spent life, was ordered by the same over-ruling Providence which guides not only the workings of the material world, but all the efforts of human minds;—wills their development—prescribes their course and direction—watches over their best exertions—permits their highest aspirations—and, when their allotted task in the great moral scheme is done, suffers them to be for a time obscured and dishonoured by weakness, and decay, and death, to rise in honour, and incorruption, and power, in another and a brighter sphere.*

* Extracted from a Memoir written, we believe, by Dr. Connolly of Warwick, and published in the Warwick Advertiser, and other provincial journals.—*Ed. Med. C. Rev.*

Mr. Thomas Alcock.

We regret to add to the above obituary, the decease of Mr, Thomas Alcock, of New Burlington-street, on the 21st of August, aged, we believe about 56—or 58. He is well known by several Essays, but especially by his paper on Medical Education, which excited some sensation, and of which we gave an account in this Journal. He was a gentleman of considerable talent, but of rather an eccentric disposition; and of very irritable temper, more especially of late years—probably dependent on the state of his health.

Mr. Alcock died a batchelor, and his nephew, who studied under him, has distinguished himself very much at Oporto, in the service of Don Pedro.

BIBLIOGRAPHICAL RECORD;

OR,

Works received for Review since the last Quarter.

1. The Homœopathic Medical Doctrine, or Organon of the Healing Art; a new system of Physic, translated from the German of S. Hahneman. By C. H. Devrient, Esq. with Notes by Samuel Stratten, M.D. 8vo. pp. 332, Dublin and London, July, 1833.

2. The Teeth, in relation to Beauty, Voice, and Health; being the result of Twenty Years' practical experience and assiduous study to produce the full development and perfect regularity of those essential Organs. By John Nicholles, Surgeon-Dentist. 8vo. pp. 134, 1833.

3. Symptome der Ascalichen Cholera, in November and December, Berlin, &c. By Dr. Robert Froriep. 4to. pp. 89, with numerous plates. Weimar, 1832.

☞ *We return the author many thanks for this interesting work.*

4. Theoretisch-practisches Handbuch der Ceburtshulfe, &c. By Ludv. Fred. V. Froriep, M.D. &c. Weimar, 1832.

☞ *This is an able and erudite Vade-Mecum, theoretical and practical.*

5. Letter on the Cholera Asphyxia, now prevailing in the City of New York, addressed to James Bond Read, Chairman of the Medical Board, Savanah. By John W. Francis, M.D. New York, 1832.

☞ *A sensible letter; but now uninteresting.*

6. Lecture delivered in the Jeffersonian Medical College, Philadelphia, on the question, "has the parotid gland

ever been extirpated?" By GRANVILLE SHARPE PATTISON, M.D. &c. 8vo. pp. 16, Philadelphia, 1833.

☞ *Dr. Pattison takes the affirmative side of the question, and we are a little surprised that the negative has been boldly affirmed by a surgical Professor in America. The present lecture is an answer, and we think a refutation of the above-mentioned assertion.*

7. Catalogue of Preparations, &c. in Morbid, Natural, and Comparative Anatomy, contained in the Museum of the Army Medical Department, Fort Pitt, Chatham. 8vo. pp. 266.

☞ *This catalogue is well arranged, and, as short histories of cases accompany the pathological specimen, the work combines incalculable advantages for those who visit the splendid Museum at Fort Pitt.*

8. An Essay on the Comparative Merits of Artificial and Natural Classification, as applied to Diseases of the Skin. By JOHN PAGET, MD. formerly President of the Royal Medical Society. 8vo. pp. 52. Reprinted from the Edinburgh Journal, No. 115.

☞ *This is a very clever performance and may be perused in our esteemed contemporary of the North, with great advantage.*

9. A Treatise on the Composition and Medical Properties of the Mineral Waters of Buxton, Matlock, Tunbridge Wells, Bath, &c. with instructive observations on the drinking of the Waters, &c. By Sir CHARLES SCUDAMORE, M.D. 2d. edit. corrected and enlarged. 8vo. pp. 215. 1833.

10. Principles and Practice of Obstetric Medicine, with Dissertations on the Diseases of Women and Children, &c. Part XXI. By DAVID D. DAVIS, M.D. 1833.

☞ *Nymphomania is still the subject of this part, and it is very ably written.*

11. Principles and Illustrations of Morbid Anatomy, adapted to the elements of M. ANDRAL, &c. By S. HOPE, M.D. Part VI. August, 1833.

12. Essays, 1st. On the Anatomy, Physiology, and Pathology of the great Sympathetic Nerve. By Mr. JAMES WILKES. 2dly. On the Anatomy of Inguinal Hernia. By Mr. W. HAMMOND, to whom were adjudged the prizes of the Birmingham School of Medicine and Surgery, for the Year 1832. 8vo. pp. 43, and 22. 1833.

13. A Treatise on those Disorders of the Brain and Nervous System which are usually considered and called *Mental*. By DAVID UWINS, M.D. 8vo. pp. 234. Renshaw and Rush, 1833.

14. Observations on Injuries and Diseases of the Rectum. By HERBERT MAYO, F.R.S. Surgeon to the Middlesex Hospital. 8vo. pp. 220. Burgess and Hill, 1833.

15. Important Information. The Insecurity of Sir H. DAVY's Lamp, demonstrated by a series of Chemical Experiments, &c.

☞ *This improved lamp is sold by W. and F. Upton, Queen-steet, Cheapside.*

16. A Report of the Method and Results of the Treatment for the Malignant Cholera, by small and frequently repeated doses of calomel; with an Inquiry into the Nature and Origin of the Complaint, &c. By JOSEPH AYRE, M.D. 8vo. pp. 167. Longman and Co. Sept. 1833.

☞ *This work came too late for notice in the present number, but we strongly recommend it to the profession.*

17. A New Exposition of the Functions of the Nerves. By JAMES W. EARLE. Part I. 8vo. pp. 195. Longman and Co. August, 1833.

☞ *In our next.*

18. Description of an Apparatus intended to facilitate the Treatment of Fractures of the Lower Extremities. By T. M. GREENHOW, Surgeon to the General Infirmary for Diseases of the Eye, Newcastle-upon-Tyne. 8vo. pp. 22, with two plates. Highley, 32, Fleet-st 1833.

☞ *Testimonials of approbation from several of the first surgeons in London are appended to this pamphlet.*

19. A Treatise on the Diseases of the Eye. By W. LAWRENCE, F.R.S. &c. 8vo. pp. 730. August, 1833. Churchill, London.

20. An Essay on Inflammation; being an Inquiry into the Causes, Phenomena, Treatment, and Terminations of this Condition. With a View to the Elucidation of the Proximate Cause. By PHILIP LOVELL PHILLIPS, M.D. Oxon, 8vo. pp. 153. London, 1833.

21. Treatise on Diseases of the Skin; founded on New Researches in Pathological Anatomy and Physiology. By S. RAYER, D.M.P. &c. Translated from the French. By W. B. DICKINSON, Member of the Royal College of Surgeons. 8vo. pp. 399. London, 1833.

☞ *In our next.*

22. Embryologie ou Ovologie Humaine, contenant l'Histoire Descriptive et Iconographie de l'Œuf Humain. Par ALF. A. L. VELPEAU, Chirurgien de l'Hôpital de la Pitié, &c. Accompagnée de Quinze Planches, dessinées et lithographiées par A. CHAZAL. A Paris et Londres chez, J. B. BAILLIERE. 1833.

☞ *For a Review of this Work see our next Number.*

23. Mémoires de l'Academie Royale de Médecine. Tome deuxiéme—3me et 4me Fascicules.

☞ *To be noticed.*

24. Traité Pratique des Maladies de l'Utérus et de ses Annexes, &c. Par MAD. BOIVIN et M. DUGES. Tome Second.

☞ *Alluded to in our present number. To be more fully noticed.*

General Index to the Medico-Chirurgical Review.

As soon as the 20th Vol. of the present Series is completed, a General Index will be put to press, for the present Series and the four annual volumes that preceded it. As the Index will involve a considerable expense, all Subscribers who desire to have it, must forward their names, through their respective publishers, with an order to have it sent, when completed, through the usual channel, with the Journal. Six months will be allowed for Subscribers, and no more copies will be worked off, than those ordered in the above manner. The General Index will make a small volume of about 200 pages, price the same as a Number of the Journal.

EXTRA-LIMITES.

*To the Editor of the Medico-Chirurgical Review.**

THE last number of this Journal contains a review of a work recently published by me, entitled "A Treatise on the Urethra; its Diseases, especially Stricture, and their Cure." Had the reviewer contented himself with criticising the opinions or disputing the positions I advanced, I should not have been induced, either by crude observations, fallacious reasoning, or ill-natured comment, to intrude myself upon your attention. He

* Mr. Phillips complains that he is injured by the review of his book on Stricture, and as the Editor never wilfully injured an author, he has readily given insertion to to Mr. Phillips' reply. The charge of ignorance or wilful misrepresentation made against the reviewer, must be met by the reviewer himself, and there the matter must end.—ED.

has however thought fit to charge me with a moral offence. I am accused of a literary fraud. I deny the imputation, and I ask of you the justice to make my denial as public as the accusation.

The charge of the reviewer amounts to this, that I have endeavoured to palm upon the public as an original invention of my own, an apparatus for cauterizing the urethra, which, to use his own language, is not merely an imitation of M. Ducamp's, but is actually the thing itself.

Basing himself upon this assumption, the reviewer has directed by turns, his wit and his indignation against the dishonest plagiarist; but I hope to satisfy your readers, that his wit has been misplaced; his indignation premature; and that, in hazarding an erroneous and groundless imputation, he has exposed himself to grave censure. In complaining of the injustice that has been done me, I desire not to impute unworthy motives to another, and least of all to a man of whom I know nothing, and to whom I am perhaps unknown.

It is however certain that the reviewer either did not understand the subject, and was therefore incompetent for the task he undertook to perform, or wilfully misrepresented what he really understood. This dilemma has not been produced by me; it has been occasioned by the reviewer himself, and he may take which alternative he pleases.

After the unqualified accusation in which he has indulged, the reader will be surprised to find that in no one page of my treatise have I arrogated to myself the merit of inventing, improving, or modifying the caustic apparatus introduced by Ducamp.

In treating on cauterization of the urethra, I stated that the objections to the old modes of applying caustic were, the difficulty of confining its action to the diseased portion of the canal—the escape of the caustic from the instrument, or its dissolution by the urethral mucus—and the necessity, from the imperfection of the instruments employed, of making the application to the anterior portion of the stricture.

I then added, p. 206, and 207, "The method of cauterization introduced by Ducamp and modified by Lallemand undoubtedly limits the application of the caustic to the particular point we wish, and presents, so far, all the advantages of which the operation would seem susceptible.

The operation is performed by introducing the caustic, protected by a canula, within the stricture, and cauterizing from within outwards."

This passage might surely be considered no very ambiguous recognition of the claims of Ducamp—no niggardly admission of a merit, it never entered into my imagination to contest: but as further evidence of my feelings, I may perhaps be allowed to cite the following extract from the preface to my work; where, after expressing my obligations to Ducamp amongst many other writers, I add the following words—"To any other writer from whom I may have derived assistance of which I am at this moment unconscious, I beg likewise to make my sincere acknowledgments, feeling as I do, that there is no species of property which should be held more sacred than the conceptions of the mind."

Surely this is a feeling little compatible with wilful and acknowledged plagiarism.

In p. 217, I recommend the use of a cutting instrument to assist the passage of the caustic apparatus in cases where the caustic cannot otherwise be introduced, and in p. 221—2, I recommend the introduction in certain cases of a cutting instrument by which the stricture may be removed without the aid of caustic.

Now those are the only urethral instruments of which I have claimed the invention, and I have yet to learn (what indeed is not asserted by the reviewer) that I am not entitled to the merit (if any) which may attach to that invention.

The reviewer has copied my description of the model sound and contrasted it with Ducamp's description of the exploring catheter, and upon the resemblance of those instruments seems to have mainly rested his charge of plagiarism.

Where however does he find any claim put forward by me to the invention of the sound? Does the introduction of a drawing of the instrument in a diagram at the end of the work constitute an appropriation by me of the invention? It might as well be said that the author of a work on surgery claims to be the inventor of all the instruments of which his work may contain a description.

Ducamp may with as much justice be charged with plagiarism, for the model sound or exploring catheter, by whichever name it may be called, is, with slight modifications, the copy of an instrument used in the 16th century by Germain and Mazelt, and later by Lemonier.

The reviewer says, the caustic apparatus is a copy of that of M. Ducamp, "but the length of M. Ducamp's description and the brevity of Mr. Phillips' prevent us from placing side by side this 'counterfeit presentment of two brothers.'"

Can it be possible that the author of this unworthy insinuation had seen the express declaration by me, that we owe the improved caustic apparatus to Ducamp and Lallemand. If he had, then indeed reviewing may truly be termed the ungentle craft.

I never once intimated that the caustic apparatus recommended by me possessed any advantage over that of Ducamp. I feel no wish to direct attention to the subject. I am now however compelled to speak out, and will shew the reviewer, that the caustic apparatus introduced by me is not a counterfeit presentment of that of Ducamp. To do this I must describe both instruments, and I shall begin with that of Ducamp, which he called a porte-caustique.

The porte-caustique is composed 1st. of an elastic gum tube of the size of a No. 7 or 8 bougie, one end of which is tipped by a rim of platina of the same diameter with the tube and of the length of about six lines—this constituted the beak of the instrument. The centre of the beak presents an orifice of rather more than a line in diameter.

2ndly. Of a fine elastic gum bougie longer than the tube into which it is introduced and terminated at one extremity by a cylinder of platinum five lines in length, and at least a line in diameter, presenting a cauliculated furrow three lines long, in which the caustic is impacted by fusion.

This cylinder fills up the orifice at the beak of the tube, which is introduced into the urethra, and when in contact with the stricture the bougie is projected beyond the beak of the tube into the orifice of the stricture—a certain number of revolutions are performed with the bougie, for the purpose of applying the caustic to the indurated surface; the bougie is then returned into the tube and the instrument withdrawn.

Such is the apparatus of Ducamp. This apparatus, ingenious as it certainly is, left much to be desired.

Thus when the stricture was long the treatment was protracted, because the porte-caustique acted only to an extent of four lines—and the bougie could not be advanced until the strictured portion of the canal was sufficiently large to permit the canula to pass. A long time too occurred occasionally before the patient found any relief; which he could not do until the caustic had been applied upon the most profound part of the stricture.

However frequently the application may have been made, the urethra could not be restored to its original diameter, for as soon as the canal was sufficiently enlarged to permit the passage of the tube, the parietes of the urethra were removed by it so far apart that they could not be acted upon by the caustic.

The flexibility of the instrument and especially of the bougie which supports the caustic, produced too, occasional inconveniences, for although the resistance occasioned by the stricture might be inconsiderable, the bougie was sometimes bent back in the canula—the cauterising portion was not projected beyond the tube, and cauterisation was not effected—or, if, as occasionally happened, the bougie did not enter the orifice of the stricture—the caustic was deposited on the healthy portion of the canal anterior to the induration, whilst no sensation was communicated to the hand of the operator to apprise him he was going wrong. The caustic too was not sufficiently protected from the mucus or blood that might be met with in the urethra, and by which it was sometimes dissolved before it could be brought into contact with the stricture.

These then are the prominent defects of the porte-caustique, and these I endeavoured to correct by the caustic apparatus I recommended, and which I shall now describe.

It consists 1st. of a platina canula, either straight or curved; its volume varying from No. 1 to No. 9 or 10, its diameter from one to three lines. This canula is open and of the same diameter at each extremity, perfectly cylindrical and intended to protect the caustic. 2ndly. Of a platina tube, longer than the canula, terminated at one end by a slight bulb formed so as exactly to block up one of the extremities, but not to project beyond the circumference of the canula, and protecting the caustic from the mucus and blood contained in the urethra.

The portion of the tube of which this bulb is a part, is from ten to twenty lines in length, and is screwed on the remaining portion; it presents a canal varying in length from 6 to 16 lines, in which the caustic is impacted by fusion. The flexibility of Ducamp's apparatus is corrected by the metallic character of mine; the confined range

of his instrument is exchanged for an extended action,—the caustic is brought with more certainty and safety into contact with the stricture, and is always protected from the mucus and blood found in the urethra.

By means of this instrument we may explore the canal—cauterize the stricture at once in all its extent—or passing through a stricture of inconsiderable character, go more profoundly and attack another more considerable; and thus treat two or more strictures at the same time, affording the patient prompt relief, and cauterizing only the diseased portion of the canal.

Ducamp's *principle* of applying caustic was similar to that recommended by me—his *mode* of doing so possessed the defects I have pointed out.

He thought that, after the orifice of the stricture had been enlarged to a certain extent by cauterization, the cure should be completed by dilatation.

I maintain that total destruction of the induration is absolutely required before a cure can be effected, and that consecutive dilatation is unnecessary, and cannot complete the cure.

Are then the principles of treatment similar?—Are the modes of application similar?—Are the porte-caustique of Ducamp, and the caustic apparatus recommended by me "a counterfeit presentment of two brothers"?

Even if all these questions could be answered in the affirmative, the term plagiarist affixed to me by the reviewer would yet be inapplicable.

I claimed no invention that does not belong to me:—I claimed neither the invention, nor the improvement of the caustic apparatus. I ascribed the invention to Ducamp, and the modification to Lallemand, but I may now ask whether I have not effected at least some improvement of that instrument.

I have not appropriated to myself the model sound, neither do I, with the reviewer, ascribe its invention to Ducamp.

When he next treats of the sound he will know that it belongs to other men and other times, and that it has been known to the profession for more than two centuries.

I commenced this article by denying the truth of the imputation of the reviewer:—I have now I trust proved the correctness of that denial; and shall willingly abide the decision of the profession on the question at issue between us.

It is somewhat singular, that whilst accused in an English periodical of injustice to the claims of a Frenchman, my work should have been reviewed in a French periodical of eminence in terms highly flattering to the author; and should be strongly recommended to the attention of the medical profession of that country. When I sat down to the composition of that work, I sought to do no more than to place before the profession the opposite opinions of the greatest men in our own and other countries, on the treatment of a distressing class of diseases, regarding which much contrariety of opinion existed—to balance fairly and dispassionately the merits of rival systems—and to state the objections, as they appeared to me, to each.

I pretended to no originality of conception, to no novelty of idea—part of my treatise was historical, part controversial; and whenever I ventured to dissent from received opinions, I endeavoured to support my own positions by authorities or by facts.

It is necessarily painful to intrude upon the world personal considerations and personal feelings; it is perhaps impossible to speak much of oneself without the appearance at least, and perhaps the reality also of an egotism, which offends if it does not disgust.

I may be however permitted to remark, that I have not needlessly obtruded myself; but have rather been dragged before the public: and with that observation, which I trust will be borne in mind in estimating these remarks, I shall conclude the present communication.

I have the honor to be,

Sir,

Your most obedient Servant,

B. PHILLIPS.

Wimpole Street.

INDEX.

A.

Abortion, Dr. Granville on 130
Abouzabel, school at 193
Abscess of kidney 159
Abscess of the septum narium 454
Abscess of the cerebellum 509
Abscess, hepatic, Dr. Roots on..... 540
Æstrus in the human subject 527
Æthmoid cells, polypus in the 278
Air, fatal effects of admission into the veins 241
Alcock, Mr. death of..... 571
Alimentary canal, hyperæmia of 332
Alison's, Dr. outlines of pathology .. 306
Amaurosis, Lisfranc's treatment of .. 199
Amaurosis from onanism 214
Amaurosis treated with strychnia .. 260
Amaurosis, Mr. Middlemore on..... 447
Ammon, Dr. on restored vision 156
Amputation at the hip-joint 195
Anatomy, pathological, M. Cruveilhier on 137
Anatomy, pathological, Dr. Carswell on 137
Anatomy, pathological, M. Cruveilhier 329
Anatomy, morbid, by Dr. Hope 329
Andes, thermal waters of the 234
Andral, M. on pericarditis..... 49
Anencephalous monstrosity, case of.. 499
Aneurism, carotid, case of 448
Animal magnetism, effects of 184
Antimony, large doses of, in phlebitis, 486
Anus, fissure of..... 542
Aorta, anomaly of the arch of 239
Apoplexy, French opinions on 504
Apoplexy of the muscles 512
Apoplexy of new-born children 138
Apothecaries, and their usurpations.. 286
Arsenic, Berzelius on the detection of 339
Arsenic, poisoning from the fumes of 504
Arteries, bruits of the 519
Arteritis and spontaneous gangrene.. 207
Ashburner on sarsaparilla..... 477
Asphyxia of new-born children..... 265
Atrophy of the fœtal brain 510
Ayre, Dr. on cholera..... 457

B.

Babington, Dr. on the black death .. 121
Babington, Dr. (Senr.) death of 161
Bacon, Lord, on medicine..... 439
Baird, Dr. unjust treatment of..... 446
Barry, Sir David, good fortune of.... 185
Baudelocque's case of the division of the symphysis pubis 502
Beccaria, Dr. on petechial fever 508
Belinaye, Mr. on smilax aspera..... 477
Bell, Sir Chas. on contracted prepuce 282
Bell, Mr. George Hamilton, on diseases of the liver 415
Berzelius, on inorganic bodies 337
Biliary abscess, case of 243
Bill, factories' regulation, on the.... 181
Birmingham Eye Infirmary, report of 257
Black death, Dr. Babington on 121
Blandin, M. on amputation at the hip-joint..... 195
Blood, analysis of the serum..... ... 502
Bloxam, Mr. case of fracture and dislocation of the femur..... 480
Blundell, Dr. on animal magnetism .. 184
Boards, medical, on the..... 180
Body, discharge of worms from the .. 168
Boivin, Madam, on the uterus 522
Bouillaud, M. on scalds..... 195
Bouillaud on pneumonia 225
Bouillaud on the bruits of the heart and arteries..... 519
Brain, inflammation of the 459
Brain, fœtal, atrophy of..... 510
Brain, disturbances of the..... 341
Bright, Dr. on nymphomania 468
Bristol Infirmary, strange exhibition at 267
Brown, M. R. elected a member of the French Institute..... 232
Bulimia, extraordinary case of..... 206
Burns, M. Dupuytren on 72
Burns, Robert, his character..... 322
Burns and scalds, Dr. Macfarlane on.. 529
Byron, Lord, his character 327

C.

Cachexy, purulent, on the..... 213
Cæsarian operation in Germany 420
Carbuncle, malignant, in Italy 203
Carcinoma, Dr. Carswell on..... 186
Carmichael, Mr. on phrenitis 459
Carotid aneurism, Mr. Montgomery's case of..... 448
Carswell, Dr. on pathological anatomy 137
Catarrh, suffocative, on..... 441
Catheterism, Mr. Phillips on..... 112
Cephaloma, Dr. Carswell on..... 187
Cerebellum, abscess of 509
Chiappa, Dr. on pellagra 507

Chlorosis, diagnosis of 196
Cholera in France, mortality from .. 212
Cholera, lectures on, by Majendie .. 244
Cholera, effects of, upon the eye 447
Cholera, Dr. Ayre on..... 457
Cholera, Dr. Froriep on..... 514
Cholera, state regulations in Saxe-Weimar against the 513
Cholera on board the Melpomene frigate..... 528
Cicatrization of burns 77
Circulation of the blood..... 247
Clavicle, excision of 501
Cloquet on the fascia transversalis .. 471
Clot-Bey, M. on the Egyptian school 193
Clot-Bey, M. on the cholera..... 222
Clot-Bey, M. on lithotomy 489
Coley, Mr. on ischuria vesicalis..... 190
College of Physicians, reform of 566
Conium maculatum, M. Fodéré on .. 218
Convulsive disease, curious case of .. 220
Cooper, Sir A. elected a member of the French Institute 232
Cornea, deposition, interlamellar of.. 448
Cornea, ulceration of..... 448
Cornea, small-pox pustule on the.... 257
Coste, Dr. on embryology 527
Cough, intermittent, cure of..... 217
Coughing, fracture of rib from 441
Cowper, the poet, his character..... 323
Crampton, Mr. on dislocations..... 270
Cranium, injuries of, during parturition 211
Crocodile, circulation in the..... 247
Croton oil as a counter-irritant..... 448
Croup, Dr. Walker on 363
Croup, Dr. Steinmetz on 501
Croup, M. Maingault on 526
Cruveilhier, M. on pathological anatomy 137
Cruveilhier's pathological anatomy .. 329
Cupping, dry, on 178
Cyanosis, on 223

D.

Dance, M. on some remarkable cures, 228
Darwall, Dr. death of..... 569
Davis, Dr. D. on hysteralgia..... 162
Davis, Dr. D. on hysteria 190
Davis, Dr. D. on nymphomania..... 465
Death, black, Dr. Babington on..... 121
Death from severe injuries..... 195
Defecation, Dr. O'Beirne on..... 1
Delirium tremens, Dr. O'Beirne on .. 26
Devrient's, Mr. transl. of Hahnemann, 429
Diathesis, purulent, case of 242
Dieffenbach, M. on restored vision .. 158
Diptherite, M. Maingault on..... 234
Diptherite, on the 245
Diptherite, M. Gendron on 528
Diseases of women, Dr. R. Lee on .. 58
Diseases of urethra..... 107
Diseases, organic, of the fœtus 140
Diseases of Egypt 194
Diseases of the liver 415
Diseases of the muscles 512
Dislocation of the shoulder, Mr. Crampton on 270
Dislocation of the hip, with fracture.. 480
Dislocation of the humerus backwards 503
Duges, M. on the uterus 522
Dupuytren, his lecons orales..... 542
Dupuytren, clinical lectures of 68
Dysentery, Dr. O'Beirne on 22
Dyspepsia, Dr. Stokes on 175
Dysphagia, treatment of..... 149

E.

Eastcott, Mr. on fatty discharge from the bowels 477
Ecthyma cachecticum, case of 242
Egypt, diseases of 194
Egypt, calculous diseases in 488
Egyptian School of Medicine..... 193
Elbow-joint, excision of..... 255
Electricity, medical, on..... 526
Embryology, Dr. Coste on 527
Emissions, seminal, on 171
Emmenagogues, Dr. Graves on..... 444
Ennui, labour of..... 185
Epidemics, natural history of 485
Esquimaux, phrenological description of the 474
Esquirol on the insane 352
Exhalation, aromatic, from the arm.. 215
Exposition of state of Coll. of Surgeons 565
Exstrophy of the urinary bladder 505
Extra-uterine pregnancy, case of 506
Eye, on the strumous affections of .. 258
Eye, the effects of cholera upon the.. 478
Eyeball, suppuration of the 444

F.

Face, ulcerations of the..... 279
Factories Bill, on the 181
Fantonelli on the itch 215
Fascia transversalis, Cloquet on 471
Fasting, extraordinary cases of..... 204
Fatty discharges from the bowels.... 477
Fees, medical, in Turkey 436
Females, examination of..... 446
Fever, M. Andral on 236
Fever, petechial, in Italy 508
Fever, Dr. Roots on 538
Fever, Dr. Latham on 544
Fishes, epidemics among 485
Fissure of anus, Dupuytren on..... 542
Fleming, Mr. on disease of the nose.. 454
Fletcher, Mr. on the influence of the mind on the body 341
Fodéré, M. on the conium mac. 218
Fœtus, organic diseases of..... 140
Fœtus, position of the 235

Fœtus, position of 515
Food, new article of 506
Foramen ovale, open, case of..... 212
Foramen ovale open, case of..... 242
Fractures of neck of the thigh-bone.. 83
Fracture of a rib, from coughing 441
Frontal sinus, Dr. Milligan on the .. 359
Froriep, Dr. manual of midwifery.... 418
Froriep, Dr. on the cholera 514
Froriep on induction of labour..... 420

G.

Gairdner, Dr. on mineral springs.... 28
Galvanism, medical 503
Gangræna senilis, Dupuytren on 492
Gangrene, spontaneous, from arteritis, 207
Gangrene of the lungs, Bouillaud on, 209
Gardner, Mr. on purpura 153
Gastritis, Dr. Stokes on 175
Gastralgia chlorotic, on the 220
Gastrotomy, successful case of..... 491
Genius, infirmities of, by Mr. Madden, 316
German literature, extracts from 493
Glasgow infirmary, cases from..... 249
Goitre, different sorts of..... 498
Gonorrhœa, Mr. Russell on 172
Gonorrhœa, communicated from the stomach 498
Gonorrhœa, cases of 549
Gout of the testis 174
Granville, Dr. illustrations of abortion 130
Graves, Dr. on various diseases..... 145
Graves, Dr. on various diseases..... 439
Graves on hydrophobia..... 451
Graves, Dr. on German literature ... 493
Guinea-worm, within the hip-joint .. 501
Gunshot wound, effects of, on memory 214
Guthrie, Mr. on herniæ..... 471

H.

Hæmorrhage, uterine, Dr. R. Lee on, 67
Hæmoptoe treated with tartar-emetic, 486
Halliday, Dr. on facial neuralgia 421
Hallucinations, Esquirol on 353
Headaches in young women 145
Headache, Mr. Carmichael on 464
Head, injuries of the 253
Health, pilgrim of 183
Health, effects of misery on 342
Heart, wounds of 84
Heart, the bruits of 519
Heart, disease of the, Dr. Jeffreys on, 365
Heart, diseases of 196
Heart, on the sounds of..... 216
Heart, polypous concretions of..... 518
Heart, abnormal cavity in..... 528
Heliotrope, the 183
Helminthology, M. St. Hilaire on.... 527
Hemeralopia, Dr. Patterson on..... 266
Hepatic abscess, case of..... 540
Hepatitis, different forms of..... 416
Hermaphrodism, M. Hilaire on..... 231
Hermaphrodism, M. Dutrochet on .. 233
Hermaphrodism, extraordinary case of 237
Hernia, umbilical, case of 453
Hernia with a double sac 283
Hernia, on, by Mr. James..... 368
Hernia diaphragmatica, case of..... 513
Hernia humoralis, cases of..... 550
Herniæ, Mr. Guthrie on..... 470
Hetling, Mr. on osteo-sarcoma of jaw, 261
Highlands, salutarium in 160
Hip-joint, amputation at 195
Homoiopathic doctrine, of Hahnemann 429
Homoiopathy in Egypt 194
Hope, Dr. on morbid anatomy..... 329
Hooping-cough treated by tartar-emetic 244
Hospital, St. George's, cases from.... 274
Hufeland on the influenza..... 485
Hutchinson, Dr. on croton-oil 448
Hydatids, conversion of..... 201
Hydrocephalus, Dr. Graves on..... 445
Hydrophobia, case of recovery from.. 451
Hydrophthalmia, Mr. Middlemore on, 259
Hymen, imperforate, effects of 190
Hypertrophy of the mammæ..... 495
Hysteralgia, on 162
Hysteria, fatal, Dr. D. Davis on 190
Hysteria, Dr. Graves on 147

I.

Imperforate hymen, effects of 190
Infants, diseases of..... 361
Inflammation, granular, of the os tincæ 524
Influenza at Berlin..... 484
Injuries, cause of death after..... 195
Inorganic bodies, the analysis of..... 337
Insane, illusions of the 352
Insane, confinement of the 356
Insanity in Italy 203
Institute, French, proceedings of 502
Institute of France, proceedings of .. 230
Intellect, march of the 184
Iodine in caries of the vertebræ..... 266
Irish pharmacy, Mr. Phelan on..... 166
Irritable uterus, on the 162
Irritable testis, on the 174
Irritable brain..... 346
Ischuria renalis, of 14 years standing, 236
Itch, bad effects from the cure of 361
Itch, treatment of, by chloride of lime, 215

J.

James, Mr. on herniary sacs..... 368
Jaundice, effects of, upon vision 444
Jaundice, yellow vision in 447
Jaw, morbid growths from the lower, 274
Jaw, upper, extirpation of..... 281
Jaws, osteo-sarcoma of the upper and lower 261
Jeffreys, Dr. on disease of the heart.. 365

Johnson, Dr. S. character 320
Johnson, Mr. H. J. on gonorrhœa.... 549

K.

Kermes mineral, in pneumonia..... 216
Kidney, abscess of 159
Kidney, abscess of 234
Kuhn, M. on hydatids 201

L.

Labour, premature, induction of 202
Labour, premature, induction of 420
Laryngeal spasm, Dr. Walker on 363
Laryngotomy, case of..... 250
Laryngotomy, two cases of 540
Latham, Dr. on the duration of fever, 544
Lectures, clinical, M. Dupuytren's .. 68
Lee, Dr. R. on diseases of women.... 58
Lee, Dr. R. on uterine hæmorrhage .. 67
Leech-bites, death from..... 216
Leeches, preservation of 209
Legacy left by M. Portal 506
Lens, regeneration of the 197
Licentiates' petition to Parliament.... 566
Liddell's translation of Esquirol's treatise 352
Lisfranc on amaurosis 199
Lithotomy, M. Dupuytren on 87
Lithotomy, M. Clot-Bey on 489
Lithotrity, report upon 503
Liver, diseases of, by Mr. G. H. Bell.. 415
Liver, mortification of the..... 443
London physicians, memorial of the.. 192
Longevity of authors, on the..... 318
Louis, M. on pericarditis 49
Lungs, gangrene of the 209
Lungs, paralysis of the 210
Luxation of vertebræ, M. Dupuytren on 68

M.

Maclean, Mr. on abscess of kidney ... 159
Maclean, Dr. on umbilical hernia. .. 453
Macfarlane, Dr. clinical reports of ... 529
Madden, Mr. on the infirmities of genius 316
Magnetism, animal, effects of 184
Majendie, lectures of, on the cholera, 245
Mammæ, hypertrophy of 493
Martinet, M. on neuralgia..... 197
Mayer, M. on the reproduction of the lens 197
Mayo, Mr. on human physiology 91
Mayo, Mr. on injuries and diseases of the rectum 289
Measles, treated by tartar-emetic 244
Medical Boards, on the 180
Medusa, the anatomy of..... 232
Melanosis, Dr. Williams on 263
Memorial of the London physicians.. 192
Memory, loss of, after a gun-shot wound 214
Menstruation, Dr. Granville on..... 130
Mental irritation and hypochondriasis, 343
Mental indigestion, Mr. Fletcher on.. 344
Mercury, use of, in syphilis 390
Mercury, effects of..... 449
Middlemore, Mr. on the diseases of the eye..... 257
Midwifery, Dr. Froriep's manual 418
Millard, Mr. on the placenta..... 66
Milligan, Dr. on the frontal sinus.... 359
Mind, influence of, on the body 341
Mineral springs, Dr. Gairdner on 28
Mineral waters, analysis of 338
Monstrosity, anencephalous 499
Monstrosity, curious example of 246
Montgomery's, Mr. case of carotid aneurism..... 448
Morbus coxarius, curious case of.... 501
Mortification of the liver 443
Muscles, diseases of 510
Muscles, apoplexy of..... 512

N.

Negroes, inferiority of the..... 151
Neilson, Mr. on worms 168
Nervous disturbances, on 341
Neuralgia of the testis 174
Neuralgia cured by animal magnetism, 184
Neuralgia, treatment of, by Martinet, 197
Neuralgia cured by quinine and morphia..... 217
Neuralgia, Dr. Halliday on 421
Neuralgia treated with belladonna.... 503
Nimmo, Mr. on restoration of vision.. 156
Nitric acid, poisoning from 546
Nose, affections of the septum 454
Nux vomica in paraplegia..... 487
Nymphomania, Dr. D. Davis on 465
Nymphomania, Dr. Bright on 468

O.

O'Beirne, Dr. on defecation 1
O'Beirne, Dr. on dysentery 22
O'Beirne, Dr. on delirium tremens .. 26
Œsophagotomy, cases of 239
Ophthalmia, Egyptian, cure of..... 221
Opium, effects of, in enemata 148
Oppenheim, Dr. on Turkish medicine, 435
Orchitis, Mr. Russell on..... 172
Orthopody, treatment of 504
Os tincæ, ulcers of..... 522
Os tincæ, granular inflammation of .. 524
Otto, Dr. on small pox & vaccination 481
Ovary, extirpation of..... 242
Owen, Mr. on the placenta 65

P.

Pains, spasmodic, treatment of..... 179
Paris, insalubrity of 241
Paraplegia, cured with nux vomica .. 487
Paterson, Dr. on asphyxia..... 265

Pathology, outlines of, by Dr. Alison 306
Pellagra, Dr. Chiappa on..... 507
Penis, abscess of the 559
Pericarditis, M. Louis on 49
Pericarditis, M. Andral on..... 49
Petechial fever in Italy 508
Petition of Licentiates of London.... 566
Phagedænic primary syphilis..... 397
Pharyngotomy, case of 251
Phelan, Mr. on Irish pharmacy..... 166
Phillips, Mr. on diseases of urethra .. 107
Phillips, Mr. reclamation of 573
Phlebitis, Dr. R. Lee on..... 60
Phlegmasia dolens, Dr. R. Lee on.... 61
Phlebitis treated with tartar emetic .. 486
Phrenological character of the Esquimaux 474
Phrenological estimate of the negroes 151
Phrenological development of Dr. Spurzheim 152
Phrenology of satyriasis 238
Physician, the qualifications of a 227
Physicians, London, memorial of.... 192
Physicians in Turkey..... 433
Physiology, outlines of, by Mr. Mayo 91
Pigeaux, M. on the cardiac sounds .. 216
Piles, Mr. Mayo on..... 296
Pilgrim in pursuit of Health 183
Placenta, structure of, Mr. Owen on.. 65
Placenta, structure of, Mr. Millard on 66
Placenta, adhesion of the 498
Plants, the physiology of 232
Pleuro-pneumonia, cases of 225
Plica polonica on the..... 214
Pneumonia hypostatica, on 212
Poisoning from the fumes of arsenic.. 504
Polypi, cardiac, purulent matter in .. 214
Polypi of the heart..... 518
Pope's character, by Mr. Madden 319
Porrigo, Dr. Roots on..... 539
Portal, legacy left by..... 506
Portio dura, neuralgia of 425
Pregnancy, extra-uterine 506
Prepuce, contraction of..... 282
Press, periodical..... 284
Provincial Association, Transactions of 358
Puerperal phlebitis, on 199
Puerperal fever, pathology of 200
Puerperal pathology 330
Pulse, state of, in hydrocephalus 445
Pulse, cessation of, in both arms 285
Purpura hæmorrhagica 444
Purpura, pathology of..... 153
Purpura hæmorrhagica, fatal case of, 210
Purulent cachexy, on the 213

Q.

Quicksilver, metallic, effects of... .. 233
Quinine, hydrocyanate of 219
Quinine in strumous ophthalmia 258

R.

Rectum, prolapsus of..... 217
Rectum, carcinoma of 252
Rectum, on disease of, by Mr. Mayo.. 289
Rectum, laceration of..... 280
Rectum, ulcer of..... 290
Rectum, protrusion of 292
Rectum, bleeding from 294
Rectum, strictures of. 299
Rectum, cancer of 303
Rees', Mr. translation of Berzelius .. 387
Reform, medical. 566
Respiration of aquatic insects 230
Retention of urine 190
Retina, ossification of the 215
Rheumatism of the testis 174
Rhinoplastic operation 489
Ricord, M. on inoculation of syphilis.. 506
Robertson, Dr. on dry cupping..... 178
Roots, Dr. on fever and rheumatism.. 539
Roots, Dr. on porrigo 539
Roots, Dr. on hepatic abscess 540
Roux, M. on fatal injuries..... 195
Russell, Mr. on the testicle..... 169

S.

Sacchi on the goitre 498
Salt, adulteration of 232
Salutarium at Oban..... 160
Sarsaparilla, effects of..... 478
Satyriasis, case of 238
Saxe-Weimar, medical regulations in 513
Scald of mouth, Bouillaud on 195
Scalds, Dr. M'Farlane on 529
Scalvanti, Dr. on abscess of cerebellum 509
Sciatica, treatment of..... 196
Scirrhoma, Dr. Carswell on 187
Scott, Mr. on extirpation of the upper jaw 281
Scott, Sir Walter, his character 328
Scrofula, treatment of 203
Scrotum, enlargement of 172
Seminal emissions, on 171
Septum narium, diseases of 454
Small-pox, Dr. Otto on 481
Smilax aspera, use of. 477
Somascetics, use of. 504
Springs, mineral, Dr. Gairdner on .. 28
Spurzheim, Dr. phrenological development of 152
Staphyloma, treatment of 156
Statistics, moral, of France 247
Steinmetz, clinical observations 501
Sterility, cure of..... 202
Stirling, Mr. surgical cases by 249
Stokes, Dr. on gastritis 175
Stokes, Dr. on dyspepsia 175
Stratten, Dr. his notes on Hahnemann 429
Strictures, Mr. Phillips on..... 114

Sudden death, from palsy of the lungs 210
Suffocative catarrh, on 441
Surgeons, Royal College of, London.. 565
Symphysis pubis, division of..... 502
Syphilis, primary, Mr. Wallace on .. 374
Syphilis, treatment of..... 381
Syphilis, inoculation of 506
Syphilis, Dr. Weatherill on 449

T.

Taliacotian operation, by M. Velpeau 246
Taliacotian operation, by M. Labat .. 489
Taliacotian operation, by M. Dupuytren 502
Tartar-emetic plaster, death from.... 215
Testicle, Mr. Russell on..... 169
Testis, neuralgia of the 174
Testis, rheumatism of the 174
Testis, gout of the 174
Tetanus, traumatic, case of 528
Thermal waters of the Andes..... . 234
Thigh-bone, neck of, fractures 83
Toogood, Mr. on dislocations 265
Toothache, cured by quinine..... 209
Tonospasmia, curious case of..... 509
Tracheotomy, case of..... .. 249
Tubercles, origin of 201
Turkey, the medical art in..... 433
Turkey, poisoning in 438

U.

Ulcers of the os tincæ..... 522
Ulcers, primary syphilitic 374
Ureter, example of a triple 504
Urethra, disease of, Mr. Phillips on .. 107
Urinary bladder, bilobed, case of 235
Urinary bladder, exstrophy of 505
Urine, retention of..... 190
Urine, luminous.... 232
Urine, state of the, in children 363
Uterine hæmorrhage, Dr. R. Lee on.. 67
Uterus, irritable, Dr. Davis on the .. 162
Uterus, bilobed, case of..... 235

V.

Vaccination in France 238
Vaccination in Germany 481
Vaccination, Lobstein on 492
Vaccine establishment, abolition of .. 181
Varicocele, on..... 175
Variola after vaccination 196
Variola and the varioloid disease 487
Varix of the abdominal veins..... 213
Veins, obliteration of..... 199
Veins, capillary, inflammation of.... 214
Venereal disease, Mr. Wallace on.... 38
Venereal disease, Mr. Wallace on.... 372
Vertebræ, luxation of..... 68
Vertebræ, carious, treated with iodine 266
Vesication, extemporaneous 203
Virey, M. on the position of the fœtus 515
Vision, restoration of..... 156
Vision, double, M. Prevost on 211
Vision, effects of jaundice upon..... 444
Vision, yellow, in jaundice 447

W.

Walker, Dr. on diseases of infants .. 361
Wallace, Mr. on venereal disease 38
Wallace, Mr. on the venereal disease.. 372
Weatherill, Dr. on syphilis and mercury..... 449
Williams, Dr. on melanosis 263
Women, diseases of, Dr. R. Lee on .. 58
Worms, discharge of 168
Worms, intestinal, on the 214
Wounds of heart 84
Wutzer on restored vision..... 158

NOTICES.

A report of some interesting cases from St. George's Hospital has been unavoidably postponed till our next number.

In our last we accidentally omitted to notice a very ingenious method of illustrating the Anatomy of Hernia, about to be given to the public, by an active and intelligent surgeon, Mr. Bloxam, of Hanover Street, Hanover Square. When it comes before us we will give a more particular account of it.